UNIVERSAL
LIBRARY

OU_150575

UNIVERSAL
LIBRARY

FIRE INSURANCE

from

Insurance Principles and Practices
Third Edition

by

ROBERT RIEGEL, Ph.D.

and

JEROME S. MILLER, B.S., M.B.A.

New York
PRENTICE-HALL, INC.

COPYRIGHT, 1921, 1929, 1947, BY
PRENTICE-HALL, INC.
70 FIFTH AVENUE, NEW YORK

ALL RIGHTS RESERVED. NO PART OF THIS BOOK MAY BE REPRODUCED IN ANY FORM, BY MIMEOGRAPH OR ANY OTHER MEANS, WITHOUT PERMISSION IN WRITING FROM THE PUBLISHERS.

First printing July, 1948
Second printing November, 1949

PRINTED IN THE UNITED STATES OF AMERICA

Contents

CHAPTER PAGE

XVII. INSURABLE INTEREST IN FIRE INSURANCE . 335

Reasons for insurable interest. Importance of insurable interest. Classification of insurable interests. Extent of insurable interest. Vendor and vendee. Bailor and bailee. Mortgagor and mortgagee. Assignment of fire policies. Policy provision relating to assignment. Effect of assignment.

XVIII. THE FIRE INSURANCE CONTRACT 351

Standard fire policy. Development of the standard policy. Provisions of New York 1943 policy: Parties to the contract; The premium and consideration; Description of the property; Extent of protection; Events covered by the policy; Articles covered; Amounts covered; Inception of the insurance; Renewal; Termination; Suspension; Voidance; Waiver provisions; Subrogation. Notes on other standard policies: Importance of other standard policies; Parties to the contract; The premium and consideration; Description of the property; Extent of protection—events covered; Amounts covered; Inception of the policy; Termination of the contract; Suspension; Voidance; Waiver; Subrogation.

XIX. ENDORSEMENTS: CLAUSES 391

Necessity for endorsements. Classification of endorsements. Nature of clauses. Permits. Clauses decreasing the liability or hazard. Clauses increasing the liability. Clauses respecting title and interest. Emergency clauses. Clauses limiting the amount payable: Coinsurance clause; Other limiting clauses.

XX. ENDORSEMENTS: FORMS 410

Descriptive forms. Classification of descriptive forms. General cover contracts. Forms extending the scope of the coverage. Forms covering perils other than fire. Forms covering consequential losses.

XXI. INSURING CONSEQUENTIAL LOSSES 428

Forms of consequential loss. Use and occupancy insurance—its purpose. Basis of insurable value. Amount of insurance. Term of the contract. Losses. Other than manufacturing risks. Types of contracts. Comparison of forms. Premiums. School use and occupancy. Contingent use and occupancy insurance. Extra expense insurance. Rent and leasehold insurance. Rent insurance policies. Leasehold insurance. Profits and commissions insurance. Accounts receivable insurance. Unearned premium insurance. Consequential damage form.

CHAPTER PAGE

XXII. SETTLEMENT OF LOSSES 449

Classification of provisions applying to loss settlements: Provisions referring to the preservation of property; Evidence of amount of loss; Agreement and appraisal; Net payment of the company: Subrogation; Pro rata liability; Nonconcurrent policies.

XXIII. FIRE INSURANCE RATES 468

Nature of fire insurance rates. Possible methods of ratemaking. Types of rates under present methods. So-called "classified" experience. Schedule rated risks. Advantages of schedule rating. The Universal Mercantile System. Analytic System. Comparison of schedules. National Board Schedule for grading cities and towns. Criticisms of fire insurance rates. The statistical method of ratemaking. Obstacles to the statistical plan. State regulation of rates.

XXIV. FIRE INSURANCE RESERVES 497

Definition of the reserve. Object of the reserve. Importance of the reserve in regard to premium payment. Calculation of the reserve. Financial importance. State regulation of investments. Expenditures and receipts. Profits. Criticisms of the fire insurance reserve.

Part IV

INSURANCE OF PROPERTY—FIRE

CHAPTER 17

Insurable Interest in Fire Insurance

Reasons for insurable interest. It is a general principle of insurance that an insured cannot use the courts to enforce collection on an insurance policy unless he possesses an insurable interest. An "insurable interest" is an interest of such a nature that the possessor would be financially injured by the occurrence of the event insured against. For example, a lender on a mortgage would be financially injured if the mortgaged property were damaged by fire, because the property is part of his security for recovering the debt. This requirement is justified on two grounds, namely: (1) to insure a person without an insurable interest is mere gambling, and it is not public policy to assist in the collection of gambling gains; (2) without insurable interest a person would be encouraged to bring about the very event covered by the policy.

Although an insured and an insurance company may enter into a contract whereby the latter is to pay a determinable sum upon the happening of a specified event, without the insured's having any financial interest in the property insured, neither party can enforce performance at law. Such a contract depends purely upon the good faith of the two parties.

This principle has probably been more strictly and consistently applied in fire insurance than in any other form of insurance. In life insurance, as we have seen, the insurable interest requirement may be easily evaded by the insured's taking a policy on his own life and assigning it. In marine insurance, valued policies are common, whereby the extent of the insured's interest is a matter of mutual agreement. Even in fire insurance it has been held that it is sufficient if an insurable interest exists at the time of the loss, although no such interest existed at the time of issuance of the policy.

Importance of insurable interest. In addition to considerations of public policy referred to above, the importance of insurable interest is heightened by the nature of the usual fire insurance contract. The company is vitally concerned, not only with the moral character of the insured, but with the nature of his financial interest in the property. In the absence of knowledge, for example, the company may be insuring a person who is joint owner or partner with an incendiary. The 1943 New York standard fire policy states that the insurance may not be for more than the extent of the interest of the insured in the property. Other forms used state that the nature of the insured's interest must be shown in the policy, unless he is the sole and unconditional owner. A

correct statement of insurable interest is important to the insured because in many states at present a policy is void unless the insured is sole and unconditional property owner. The policy is also void if the insured has concealed or misrepresented any material fact or circumstance. Except in the New York 1943, Massachusetts, and Texas forms, all the insurable interests later enumerated must be described in the policy if other than the interest of a sole and unconditional owner.

Classification of insurable interests. It is important to examine the various kinds of insurable interest because (a) they illustrate the varied uses that may be made of fire insurance contracts and (b) they indicate the types of cases in which it is necessary to state carefully the nature of the insured's interest.

1. Ownership. The clearest and most common case of the existence of an insurable interest is that of an owner of property. The owner has an insurable interest, whether he be the legal or the equitable owner. When an executory contract of sale exists, the purchaser to pay for the property in installments, the vendor has the legal title and thus has an insurable interest, and the vendee has an equitable title and also an insurable interest. A partner has an equitable interest in the firm's property. In order to have an insurable interest a person need not be the sole owner, but may be a joint owner of property. It is not necessary that the time of ownership be unlimited. A life tenant, entitled to the use of the property during his lifetime only, has an insurable interest. A stockholder in a corporation is sometimes alleged to have an insurable interest in the corporation property, because he is part owner of the corporation.

2. Creditors. A creditor has an insurable interest in property on which he has a lien for the debt. Examples are pledgees holding property as security for debt, transportation companies for the charges on goods, builders for value of materials, mortgagees for the amount of the mortgage. Builders, mechanics, and warehousemen have an insurable interest in property on which they have a lien. These all have a right *in rem,* or in the particular property itself. A general creditor has no property right in his living debtor's property and hence no insurable interest in it, but he may obtain a judgment for the debt, creating a lien, and thus an insurable interest.

3. Interest arising from contract. A person may, by virtue of a contract, have a personal claim against another, called in law a right *in personam* as distinguished from *in rem.* Where the contract contains such a provision so that the claim will be jeopardized by the destruction of the particular property, the party possessing the claim has an insurable interest. For example, an owner may rent his building to a lessee on a contract which provides that the rent shall cease in case of fire. In this illustration the rent lost by fire can be insured by the owner. The holder of a contract promising royalties to be paid him by an oil filtering works for the use of a patent used there would have an insurable interest in the oil works.

4. One who is legally liable. If an individual has responsibility for

the safety of a property, he is legally liable in case of damage, and has an insurable interest. For example, a bailee, with whom goods are left for repair, may assume responsibility for their safety, in which case he has an insurable interest. The same might be true of transportation companies, bailees for hire, lessees or contractors. Ordinarily a bailee is not legally responsible for loss of goods by fire unless he is negligent, but if he assumes such liability he needs protection against fire loss. Frequently bailees for hire, such as laundries and dry cleaning establishments, voluntarily assume the responsibility for goods left with them. This voluntary assumption of responsibility differs from merely an agreement to procure insurance for their customers, which would fall in class 3 above. Legal liability may also arise merely out of negligence, as, for example, when it was held that a railroad had an insurable interest in property along its right of way because it was liable for fires negligently caused by sparks from locomotives.

5. Representative of owner. There are some cases in which the representative or agent of the owner has an insurable interest. For example, a warehouseman may insure goods stored in a warehouse for the benefit of the owner, without specifying the owner by name. Usually the representative does so by obtaining a policy issued "to whom it may concern" or a policy insuring goods that are "his own, held in trust or on commission." Such policies are frequently issued to bailees, transportation companies, grain elevators, laundries, repair men, and so on. It might be said with considerable truth that in these cases it is the insurable interest of the owner of the goods, rather than that of the representative, which is insured. But since the policy is procured by the representative and he can collect the proceeds in some cases at least, it seems best to mention this type of insurable interest as a separate category.

6. Expectations. In general, a mere expectation is not sufficient to create an insurable interest. It is generally said that a son who expects to inherit under a will his father's property has no insurable interest. But it is difficult to say how far the recognition of economic interests that are not legally enforceable may be carried by courts, and therefore border line cases will arise under this category.

Extent of insurable interest. In general the extent of an insurable interest is determined by the amount of loss that will be suffered if the event insured against occurs. This rule is not difficult to apply except when there is more than one interest in the same property or when the prospective loss is difficult to estimate.

A sole owner has an interest in the property to its full value, whereas joint owners' interests are indicated by their proportionate shares in the property. A life tenant's interest is the present value to him of the use of the property for the remainder of his life. This value is more difficult to estimate, but the principle is clear. A stockholder can recover only his pro rata share of the value of the property damaged, as measured by his per cent of ownership in the corporation.

In the case of goods insured by representatives of the owner, such as commission men, bailees for hire, and so forth, the value of the goods

belongs to the owner and may be insured for his benefit by the bailee. The bailee may also insure the amount of his commission or fee. One who is legally liable may insure the property for its full value. If the owner is also insured, the insurance company paying the owner is subrogated to his rights to collect from the person legally responsible.

A secured creditor, in general, has an insurable interest in the property under the lien, to the extent of the debt and unpaid interest on it. Thus a mortgagee may insure to the amount of the mortgage. The owner may also insure for the full value, and the principle of subrogation prevents overpayment by the insurance company, as described later. When goods are sold on a charge account, full title passing immediately to the purchaser, and the seller having no lien on the goods, the seller is evidently an unsecured creditor with no property right in the particular goods, and therefore no insurable interest.

Insurable interests arising out of contracts are measured by the amount that the contracting party will lose by the destruction of the property. A bailee may assume responsibility for the safety of the goods entrusted to him, or a builder may contract to deliver a completed building. A contractual interest frequently arises out of a provision that one party to a contract will insure for the benefit of the other party.

A more detailed description now follows of three common commercial instances of insurable interest other than ownership, namely: (1) vendor and vendee; (2) bailor and bailee; (3) mortgagor and mortgagee.

Vendor and vendee. If property has been sold under an executory contract of sale, the terms of the contract being as yet unfulfilled by either party, both parties have an insurable interest in the property. Such contracts are frequently entered into for real estate.

In the case of real estate under such a contract, a vendee who enters into possession of the property is generally regarded as the sole and unconditional owner, with an insurable interest to the full value of the property. The vendor also has an insurable interest to the extent of the unpaid balance. If the vendor remains in possession of the property, he is regarded as the owner in some jurisdictions, whereas the vendee has an insurable interest to the extent of his equity only, unless he has contracted to insure for the vendor's benefit.

Under these circumstances the two interests may be taken care of in one of three ways. (1) The policy may be written in the names of both vendor and vendee, stating the respective interests of the two parties. (2) A policy may be written in the name of the vendee with a loss payable clause attached in favor of the vendor as his interest may appear. (3) A policy may be written with a loss payable clause attached (a) in the name of the vendor when the vendor retains possession of the property or (b) in the name of the vendee when the vendee is in possession.

Personal property is often sold on the installment plan through conditional sales agreements or leases. In either case the title usually remains with the seller and passes only upon completion of the payments. The seller thus has an insurable interest to the full value and the buyer for the equity he has in the goods. If, however, the vendee has contracted

to protect the vendor against loss by fire, the buyer has an insurable interest to the full value.

The practical significance of this discussion is that when more than one insurable interest exists in the same property the best solution is to write the policy in both names, with a statement of the nature of the agreement, making loss payable to each as his interest may appear. This precaution (a) protects the company against overinsurance, (b) protects both interested parties, and (c) eliminates the involvement of the insurance company in legal disputes.

Bailor and bailee. A bailee is a person or company holding goods belonging to another called the bailor. A storage warehouse is an example of a bailee who holds goods for hire. The borrower of a book is a gratuitous bailee. A bailee who expects to derive some benefit, such as commissions, from holding or selling property, has an insurable interest in the goods in his own right to the extent of the benefits he would derive.

A bailee, however, except in a few cases, is not responsible for the safety of the goods unless the loss is due to his negligence, and since he is not the owner of the goods, he cannot take out a policy *as owner* for the full value. Frequently, however, the bailee takes insurance on the value of the goods for the benefit of the owner, obtaining a policy covering goods "held in trust or on commission." When he does so, he is considered by law to have an insurable interest sufficient to enable him to collect the proceeds of the policy, the excess of which over his own claims he holds in trust for the owner. If he has contracted to be responsible for the safety of the goods, he has, of course, an insurable interest arising out of his contract liability.

Mortgagor and mortgagee. One of the most frequent cases of two concurrent insurable interests arises from the relation created by a mortgage of real estate. The courts have always recognized the existence of more than one insurable interest in mortgaged property, the mortgagor having an insurable interest equal to the value of the property, and the mortgagee having an insurable interest equal to the amount of the debt.

There have been several methods whereby these two interests have been protected, and because of their importance considerable space will be devoted to a description of them. Although under any method the mortgagee has some protection, its extent is not equal under all circumstances or in all jurisdictions. The mortgagee's status is subject to interpretation by the intermediate courts and the courts of last resort of the forty-eight states, besides the federal courts, although the tendency of all of them is to favor him as much as possible. The following are five principal methods that have been used to insure the mortgagee:

1. Mortgagee's policy covering his own interest. In this method the mortgagee takes out separate insurance for his own benefit, in which the mortgagor has no rights whatsoever. Assume for the moment that the mortgagor possesses no insurance policy of his own.

In case of loss in this instance and payment to the mortgagee, the insuring company becomes possessed of the contractual right to collect at the maturity of the mortgage a sum equal to the indemnity paid. To permit

otherwise would be to grant the mortgagee double indemnification. He would collect the amount of the loss from the insurance company, and his claim on the mortgagor would be undiminished. Therefore the insurance company becomes "subrogated" to the rights of the mortgagee to the extent of the indemnity paid. An illustration will make this point clearer. Assume that *O* possesses a property valued at $10,000, which he has mortgaged to *M* for a loan of $9,000. *M* insures his interest for $9,000, and a loss of $8,000 subsequently occurs. The insurance company pays *M* $8,000 and by subrogation acquires *M*'s right to collect $8,000 from *O* at the expiration of the term of the mortgage, *M* retaining the right to collect at that time the remaining $1,000 due him. The insurance company, if it can ultimately collect the $8,000 from *O*, loses nothing. If *O* refuses to pay, foreclosure may be made, and if the property brings only, say, $8,500, the company loses $500, since it cannot legally in the collection of its claim against *O* prejudice in any way *M*'s contractual right to $1,000. An alternative settlement is the payment to *M* by the company of the entire mortgage debt, $9,000, and the company's acquisition by subrogation of the entire claim for $9,000. This solution substitutes the insurance company for the mortgagee.

The advantages of this method are few and accrue only to the mortgagee. It enables the mortgagee to select the particular insurance company he desires. If the owner for some reason (such as disappearance of his equity in the property) refuses to carry insurance, the mortgagee can carry it in his own name. As will be seen later, however, both mortgagor and mortgagee may be protected by the same policy at no additional cost, through the use of a mortgagee clause, under which the mortgagee gets more rights and privileges than under his own contract. The disadvantages to the mortgagee are that he must supervise the insurance and also pay the premiums. Such separate insurance is also disadvantageous to the insurance company, since it increases the difficulty of supervision, the moral hazard, and the danger of nonconcurrent policies.

The mortgagor, with his insurable interest as owner, may also obtain a policy on the same property for his own protection if he chooses to do so. In such a case the insurance company must settle with both mortgagee and mortgagor. In the event of a loss it pays the mortgagee the loss in cash and, being to that extent subrogated to the mortgage, pays the mortgagor by canceling the mortgage debt to the extent of its liability to him. If the mortgagor's policy proves to be void for any reason, the debt of course is not canceled.

2. Assignment of the mortgagor's policy. A second method is the assignment to the mortgagee of a policy held by the mortgagor, with the consent of the insurance company. The efficacy of this method is doubtful, since the mortgagee acquires by assignment only such rights as the mortgagor possesses at the time of assignment. A fuller explanation of assignment is given at the end of this chapter. These rights depend to some extent upon the nature of the assignment and the jurisdiction. Violations or misrepresentations may have voided the policy, and in many states the mortgagee would then obtain a valueless piece of paper. In

addition, the mortgagee often has no legal status as a contracting party and consequently may not be entitled to notice of appraisal, to participate in negotiations after a loss, to redress if the mortgagor agrees to an inadequate settlement of the claim, and so forth.

3. Endorsement of "loss payable clause." A more extensively used method of obtaining insurance of a mortgagee's interest is the endorsement upon the mortgagor's policy of the so-called "loss payable clause," stipulating "loss, if any, payable to ————, as his interest may appear." From the standpoint of the companies this method is desirable in a number of states because of the liability of the mortgagee for the acts of the mortgagor, and in general because of the elimination of separate insurance of interests in the same property and the reduction of the moral hazard. But the desirability of such a method from the mortgagee's standpoint, it is to be strongly emphasized, depends entirely upon the state where it is used; there being two radically different interpretations of his rights.

One of these is that such an endorsement renders the mortgagee an appointee and representative of the mortgagor to receive the insurance money. Where this interpretation obtains, no method could afford him less protection than the "loss payable clause," since it subjects him to all the defenses available against the mortgagor, without the rights of the latter. Since he is not legally a party to the contract, an award is binding on him, the election to build or repair may be exercised without notice to him, and he suffers all the disadvantages of the previous method.

In marked contrast are the states that consider the endorsement of a "loss payable clause" the creation of an unconditional, independent contract between the insurance company and the mortgagee. When thus interpreted, this method cannot be surpassed. Since the mortgagee is not bound by the conditions of the policy, the acts of the mortgagor cannot be set up as a defense against him, and yet he possesses all the rights of the mortgagor. The numerous decisions rendered on various policy forms with respect to differently worded "loss payable clauses" make it difficult to arrive at any general conclusion as to the law on the subject. In Texas, a statute provides very broad protection for the mortgagee, who is not affected by any condition beyond his control.

4. The "standard mortgagee clause." Of all the methods of protecting the mortgagee's interest, the most prevalent, because of its general effectiveness, is the endorsement on the mortgagor's policy of a "standard mortgagee clause." One form of such a clause is as follows:

STANDARD MORTGAGEE CLAUSE

Loss or damage, if any, under this policy, shall be payable to.....as .....mortgagee (or trustee), as interest may appear, and this insurance as to the interest of the mortgagee (or trustee) only therein, shall not be invalidated by any act or neglect of the mortgagor or owner of the within described property, nor by any foreclosure or other proceedings or notice of sale relating to the property, nor by any change in the title or ownership of the property, nor by the occupation of the premises for purposes more hazardous than are permitted by this policy.

PROVIDED, that in case the mortgagor or owner shall neglect to pay any premium due under this policy, the mortgagee (or trustee) shall, on demand, pay the same.

PROVIDED, also, that the mortgagee (or trustee) shall notify this company of any change of ownership or occupancy or increase of hazard which shall come to the knowledge of said mortgagee (or trustee) and, unless permitted by this policy, it shall be noted thereon and the mortgagee (or trustee) shall on demand pay the premium for such increased hazard for the term of the use thereof; otherwise this policy shall be null and void.

This company reserves the right to cancel this policy at any time as provided by its terms, but in such case this policy shall continue in force for the benefit only of the mortgagee (or trustee) for ten days after notice to the mortgagee (or trustee) of such cancellation and shall then cease, and this company shall have the right, on like notice, to cancel this agreement.

Whenever this company shall pay the mortgagee (or trustee) any sum for loss or damage under this policy and shall claim that, as to the mortgagor or owner, no liability therefor existed, this company shall, to the extent of such payment, be thereupon legally subrogated to all the rights of the party to whom such payment shall be made, under all securities held as collateral to the mortgage debt, or may at its option pay to the mortgagee (or trustee) the whole principal due or to grow due on the mortgage with interest, and shall thereupon receive a full assignment and transfer of the mortgage and of all such other securities; but no subrogation shall impair the right of the mortgagee (or trustee) to recover the full amount .....claim.

The only obligations assumed by the mortgagee are (1) to pay the premium, if it is not paid by the mortgagor (failing which the policy would be canceled by the company) and (2) to notify the company of any change in ownership or increase of hazard within his knowledge. In return he is granted the advantages of (1) having his loss paid, (2) obtaining immunity from any act or neglect of the mortgagor, and from voidance of the policy by foreclosure proceedings, change in title or ownership, or increase in the hazard, (3) receiving ten days' notice of cancellation instead of five, (4) preserving his interest unimpaired by subrogation, and (5) having the privilege of suing on the policy in his own name, although he has paid no price for the protection.

Such favorable treatment as is outlined in the clause is accorded mortgagees by insurance companies because of the mortgagees' inability to control the acts of their debtors, their recognized right to protection, and their usual excellence as moral risks. By such a clause, it will furthermore be noticed, the right to subrogation is reiterated and acknowledged in the contract. An endorsement of this nature creates what is substantially an independent contract between the insurer and the mortgagee. The word "independent" is qualified because two lines of decisions are existent on the liability of the mortgagee for his debtor's acts. In four states he has been declared entirely unaffected by such acts, whether committed prior or subsequent to the endorsement on the policy of the "mortgagee clause." In four other states he has been held exempt from the consequences of acts occurring after its endorsement. In one of these states, the provisions of the standard policy that refer to conditions after a loss were held to be inapplicable and not binding on the

mortgagee: he is privileged to submit proofs of loss, to receive notice of appraisal, and to be exempt from the "rebuild or repair" provision.

Illustrations will serve to define distinctly the nature of the settlement of claims under the "mortgagee clause." Suppose that the value of *O*'s property is $10,000, that it is mortgaged to *M* for $4,000, and that *O* obtains a fire insurance policy for $10,000 on which a "standard mortgagee clause" is endorsed for *M*'s protection. A loss of $3,000 occurs. The company will pay to *M*, the mortgagee, $3,000. *O*, the owner, having an interest in the policy, however, is entitled to protection, and therefore is credited by *M* with $3,000 in liquidation of the debt, being thus reimbursed for the $3,000 damage to his property. An equivalent settlement would have been for the company to pay *M* $4,000, then to take over *M*'s claim against *O* of $4,000 and credit *O* with $3,000 toward payment of the claim.

A situation may exist, however, in which *O* has violated the terms of the insurance contract, and the company disclaims all liability to him. In this contingency, when *M* receives $3,000 from the insurance company, instead of *O*'s being credited with $3,000 toward the payment of the debt, the insurance company is subrogated to $3,000 of *M*'s claim against *O* at the expiration of the mortgage. Thus *O* loses $3,000 because his policy was void, and the settlement is made as if *O* has never had an interest in the insurance.

For the ordinary mortgagee the endorsement of the "mortgagee clause" affords the best protection in most states. Its advantages may be summarized as follows:—

(a) The prejudicial effect of the mortgagor's acts on the mortgagee's rights is considerably diminished in some states and entirely eliminated in others.

(b) The mortgagee acquires legal rights as a party to the insurance contract.

(c) The mortgagee is exempt in some states from certain provisions of the standard policy, such as the "repair and rebuild clause" and the provisions applying after a loss.

It has disadvantages, in comparison with other methods, in only a few jurisdictions. It appears to be inferior to the "loss payable clause" in a limited number of states.

Mortgagee clause and contribution. Two types of mortgagee clause are in use, one "without contribution" and one "with contribution." The latter is created by inserting in the former clause the following paragraph:

> In case of any other insurance upon the within described property this Company shall not be liable under this policy for a greater proportion of any loss or damage sustained than the sum hereby insured bears to the whole amount of insurance on said property, issued to or held by any party or parties having an insurable interest therein, whether as owner, mortgagee or otherwise.

The significance of this "contribution provision" may be illustrated by an example. An owner (*O*) of a property worth $20,000 mortgages it to

a mortgagee (M) for $10,000. O has a policy for $10,000 in the X insurance company and gets a mortgage clause attached to it for M's protection, the clause containing the contribution provision. Later O secures another insurance policy for $5,000 in the Y insurance company, for his own sole benefit and without M's knowledge. A loss of $3,000 occurs. The X insurance company contends that there is altogether $15,000 insurance on the property, of which it has written $10,000, and offers to pay M 10/15 of $3,000 or $2,000. M objects that this settlement does not fully protect his interest as the mortgagee clause promises, the loss being $3,000.

The legal decisions are at variance on this point, some holding that the contribution provision conflicts with the provision that the mortgagee's rights shall not be impaired and deciding in favor of the mortgagee, others holding that the contribution provision (as was probably intended) qualifies the mortgagee's right to collect.[1] It is plain that the clause without contribution is more certain in its protection of the mortgagee, whereas the clause with contribution at least renders his position debatable.

5. Special contracts. An even more satisfactory method of completely protecting the mortgagee is the formation of a special contract between insurer and mortgagee, embracing exceptional features for the latter's benefit. This method, however, is chiefly used by trust companies and large lenders, who place a great deal of insurance of this nature. With the great development of mortgage lending, large financial institutions have secured special agreements from the companies, which take precedence over policy provisions and endorsements on policies. Some of these agreements cover substantially the same features as the standard mortgagee clause, but others have secured even greater rights to the mortgagee. A typical example of such an agreement provides, in addition to the stipulation of the usual mortgagee clause, that: (1) the principle of "contribution" is applied only to other insurance that has come to the notice of the mortgagee, he being obligated to report that to the company; (2) when a borrower turns over an insurance policy as security for a loan, that policy is automatically brought within the scope of the special agreement; and (3) the same procedure is followed when mortgages are acquired by taking over other banks or trust companies. Insurance companies sometimes obtain certain concessions in these special agreements, such as (1) exemption of chattel mortgages from the scope of the agreement, (2) nonliability to the mortgagee for small losses that do not impair the security for the debt (when there is no liability to the mortgagor), and (3) additional privileges with respect to subrogation.

Second mortgagees. When second and third mortgages are used in financing properties, the practices vary. In some cases companies prefer that the first mortgagee be protected by a mortgagee clause and the

[1] See *Eddy v. London Assurance Corp.*, 143 N. Y. 311 (1894) and *Bennett v. Insurance Co.*, 198 N. C. 174 (1930), as compared with *Williams v. Hartford Fire Insurance Co.*, 63 Fed. 925 (1894). In *Hastings v. Westchester*, 73 N. Y. 141 (1878), it was held that in the absence of the contribution provision the mortgagee was entitled to full recovery.

second and subsequent mortgagees be protected by a simple loss payable clause. Some underwriters have contended that it is better to name all mortgagee interests in one standard mortgagee clause, describing the order in which payments are to be made. The first mortgagee, however, frequently objects to the inclusion of other interests in his clause, and then the mortgagor procures one policy containing a mortgagee clause for the benefit of the first mortgagee and another policy endorsed with a mortgagee clause for the benefit of the second and third mortgagees.

Assignment of fire policies. There are two situations in which an assignment of a fire policy before a loss may be useful. One exists when the property covered by the policy is sold or given away and it is desired to transfer the policy to the new owner. In this case the control of the property and the interest therein passes out of the hands of the original insured to the new owner. If the policy could not be assigned it would be necessary for the original owner to cancel it and thus pay a higher premium because of the short rate charged for cancellation before the expiration date named in the policy.

The second situation exists when the original policyholder wishes to use the fire policy as protection for a loan, and to transfer an interest therein to a creditor. In this instance the control of the property and some interest therein remains with the original insured, who is still the owner. In the case of real estate, as we have seen, this object is commonly accomplished by means of a mortgagee clause or loss payable clause. In the case of personal property, other methods are used. The assignment is convenient in this instance, not only to avoid the short rate that would be charged for a cancellation, but to avoid the unnecessary issuance of extra policies. The original policy would have to be canceled, a new one issued to the creditor (which would be canceled upon repayment of the loan), and another new policy issued to replace the original policy.

Policy provision relating to assignment. Fire policies, unlike marine policies, have never been held to be freely assignable because such a feature has not been thought necessary to meet commercial exigencies. A restriction is placed upon assignment by an express provision in standard policy forms. The 1918 New York policy, for example, states: "This entire policy shall be void, unless otherwise provided by agreement in writing added hereto, if this policy be assigned before a loss." [2] The 1943 New York form does not state that the policy shall be void, but says that the assignment shall not be valid without written consent of the company. As a fire policy is a personal contract it has always been held that the insurance company is privileged to select the persons it desires to insure. Perfect freedom of assignment would nullify this right. For this reason the provision above was made part of a number of contracts, and with few exceptions it has been enforced by the courts.

It will be noted, however, that the limitation applies only to assignment *before* a loss. Assignment after a loss is dealt with later. It should also be noted that when a policy is payable to the insured "or his

[2] The old New York, Michigan, and California forms are the same as the New York 1918 policy. The Massachusetts form omits the words "before a loss."

ıssigns," or when the policy is written for the benefit of "whom it may ɔncern," or on goods "held in trust or on commission," the consent of ıe company is unnecessary because these endorsements supersede the ɔlicy condition.

Effect of assignment. In the first situation described above, in which ıere is a transfer of the property and it is desired to assign the policy, the company consents in writing to the assignment the new owner of ıe property acquires a new and independent contract. He has a good ɔntract regardless of any previous violations by the original insured. he same assertion is certainly true of violations known to the company t the time of assignment and it has been applied even to violations unnown to the company at the time of the assignment.

If the assignment is made without the consent of the company, the olicy is void as to both assignor and assignee. The former has no longer ny insurable interest and has also made a change in interest, title and ossession, not to mention possible increase of hazard. With the assignee ıe company has no contractual relation.

In the second situation, in which the policy is used simply as collateral ɔr a loan, the conditions are different. If the consent of the company ı obtained, the policy is of course valid, provided the insurable interest of ıe assignee is correctly stated. Even without the consent of the company in these cases the courts have been liberal in the treatment of the ;atus of the insured.

Strictly construed, the policy provision previously referred to would ppear to state that any assignment before a loss without consent relieves ıe company of all liability. But this view depends upon the interpreıtion of the word "assignment," and the courts have often considered ıat certain cases of transfer are not "assignments" as contemplated by ıis clause. Only instances in which the assignor parts with all his rights nd creates a privity between the assignee and the insurer are considered ssignments. As instances in which the assignor does not part with all is rights, we have:

1. Assignment for the benefit of a creditor without assignment of assets.
2. Assignment of the amount secured by the policy.
3. Deposit of policy as a pledge.
4. Deposit of policy as collateral for a chattel mortgage.
5. Assignment with a bill of lading as collateral security. In these ıstances the assignee does not acquire all the rights against the insurer ɔssessed by the insured, nor all the rights that would have been obtained ɔy an assignment with the consent of the insurer. These are merely ases in which the policy remains in effect and in which the assignee has , claim upon the proceeds of such policy when paid to the assignor.

One of the most frequent examples is that in which a bank advances ıoney upon goods stored in a warehouse. The attachment of a loss ɔayable clause is a method that has been commonly used, but the protecion to the bank is questionable. Although a mortgagee clause would be ıore satisfactory, it is customary to use this clause only for real estate. f the policy is issued to the bank for "account of whom it may con-

cern," any creditor may make claim to the proceeds, and some question might arise with respect to contribution. Another method that has been suggested is to issue policies covering owner and/or bank, as interest may appear, with loss payable to the bank.

There is, finally, the case in which an assignment is made following a loss. This method amounts to assigning, not the insurance, but merely the proceeds of the insurance, and is similar to the assignment of a debt, such as an "account receivable" of a mercantile house. The courts have even decided that it is against public policy to permit a company to stipulate in its contract that it will not make payment to a person so appointed, for such a transfer of a *chose in action* is always permitted in equity. It should not be deduced, however, that, if the property has been transferred before a loss, the insurance can always be transferred after a loss so as to give the purchaser rights thereunder.

Summary

I. An insurable interest is necessary to enforce an insurance contract.
   A. A person possessing an insurable interest is one who would be financially injured by the occurrence of the event insured against.
   B. This rule is based on public policy and desire to reduce moral hazard.
   C. The insurable interest must exist at the time of the loss.
II. The insurable interest rule is important to both company and insured.
III. Insurable interests are very varied, but may be classified as
   A. Ownership.
   B. Creditors.
   C. Interest arising from contract.
   D. Legal liability.
   E. Owner's representatives.
IV. The extent of insurable interest is, in general, determined by the incidence and amount of the loss.
V. Three common commercial cases of concurrent insurable interests are:
   A. Vendor and vendee.
   B. Bailor and bailee.
   C. Mortgagor and mortgagee.
      1. Mortgagee's own policy.
      2. Assignment of mortgagor's policy.
      3. Loss payable clause.
      4. Standard mortgagee clause.
      5. The mortgagee clause with contribution.
      6. Special contracts.
VI. Assignment of fire policies.
   A. Sales *v.* pledges of property.
   B. Policy provisions require consent to assignment.
   C. Effect of assignment.
      1. In transfer of property, written consent makes a new and independent contract.
      2. Lack of written consent voids the policy for both assignor and assignee.
      3. When property is pledged and policy is collateral, written consent makes the assignment valid.
      4. Even without consent, the tendency has been to protect the assignee, to facilitate commercial transactions.
   D. Assignment after a loss is valid without consent.

Readings

Barbour, R. P., *Agent's Key to Fire Insurance.* Philadelphia: Spectator Co., 1939, Chaps. 6, 13.

Insurance Society of New York, *The Fire Insurance Contract.* Indianapolis: Rough Notes Co., 1922, Chaps. 8, 11, 12, 36.

Riegel, R., "Protection of a Mortgagee's Interest in Real Property." *Journal of Political Economy,* December, 1915.

Patterson, E. W., "Insurable Interest of Bailees." *Journal of American Insurance,* November, 1927.

Bament, W. N., "Matters of Fire Insurance Practice about which the Agent Should Know." *Economic World,* April 8, 1921, to February 11, 1922.

Anderson, T. H., "Special Mortgage Agreements." *Fire Underwriters' Association of the Pacific,* 1928.

Goble, Geo. W., "Liability of a Mortgagee under a Standard Mortgage Clause." *Journal of American Insurance,* February, 1935, pp. 13-28.

Goldin, A. J., *Principles of the New York Standard Fire Insurance Policy.* Philadelphia: Insurance Publishers, 1938, Chaps. 21, 52.

See also references on *The Fire Insurance Contract,* Chap. 18.

Problems

1. Indicate the correct and incorrect statements among the following:

(a) Insurable interest must exist at the time of the loss.
(b) For a loss to be collected, insurable interest must exist at the time the insurance is obtained.
(c) Insurable interest arises only out of legal or equitable title.
(d) The amount of all insurable interests in a property never exceeds its value.

2. Lawrence owns the machinery, furniture, and fixtures of a printing plant, which he insures. Lawrence sells a half interest in these articles to Morris. Should Lawrence report the sale to the insurance company?

3. What is the difference between the doctrine of insurable interest applied in fire insurance and in life insurance?

4. Naylor is an only son and expects to inherit $50,000 of real estate that his father owns, upon the death of the latter. Has Naylor an insurable interest in the property?

5. Smith leaves his overcoat at the Elite Tailors to be dry cleaned. Have the Elite Tailors an insurable interest in the coat? *O* leaves her fur coat with Berg, who conducts a business of cleaning and repairing fur coats. What would *O*'s situation be if her coat were destroyed by a fire in Berg's store?

6. *O* is repairing his house. He borrowed $200 from *G* to buy the material used and gave *G* a promissory note for $200 at 6 per cent interest. Carpenter *L* agreed to wait six months for payment of his bill of $400. Has either *G* or *L* an insurable interest in *O*'s house to support a fire insurance policy? If a company issues a policy and a loss occurs, what is the position of the parties?

7. Plymouth Rock Company sells an incubator outfit to Apsley for $4,000 on the installment plan, to be paid for at the rate of 5 per cent a month, Apsley giving 20 promissory notes. Plymouth Rock Company discounts the notes at a bank for $3,900. Has Plymouth Rock Company an insurable interest in the incubator outfit?

8. How would you protect the interest of Apsley in Problem 7?

9. Adams owns jointly with Bailey a house that stands upon ground leased from Carey. At the expiration of the lease, the house is to belong to Carey.

Adams and Bailey have installed $1,000 worth of plumbing and heating fixtures, which are to remain theirs at the expiration of the lease. They insure the building without explaining the circumstances to the insurance company. Is the policy valid? Give *all* your reasons.

10. *O* (owner) owns a property worth $10,000. He borrows through a mortgage from *M* (mortgagee) $6,000. *O* has a $9,000 insurance policy in Company *C* and desires to have a loss payable clause endorsed on it reading "Loss if any payable to *M*, as his interest may appear." Is this clause desirable from the company's standpoint? From the mortgagee's standpoint? Why?

11. Compare the protection of a mortgagee's interest given by an assignment of the mortgagor's policy with that given by a mortgagee clause.

12. What are the *rights* of a mortgagee under the mortgagee clause? What are his *duties?*

13. *O* owns a property valued at $12,000, uninsured. *O* mortgages the property to *M* for $6,000. *M* insures his interest in Company *J* for $6,000. A loss of $2,000 occurs. How would this loss be settled?

14. *O* insured his house in the *X* Insurance Company for $10,000. On January 12 he sold a half interest therein to his brother *B*, without notifying the insurance company. On March 15 *O* and *B* mortgaged the property to Hall for $6,000, and assigned the policy to Hall with the insurance company's consent. Is Hall protected?

15. *O* owns a property valued at $14,000 and insured for $14,000. He borrows $10,000 from *M* on a mortgage, and to protect *M* has endorsed on his policy "loss, if any, payable to *M* as his interest may appear." A loss of $4,000 occurs and the policy is void as respects *O* because of an unreported increase in hazard. In what ways may this loss be settled?

16. *O* owns a property worth $8,000. He has a policy in the *X* Insurance Company for $8,000 covering the property, issued three months ago. *O* mortgages the property to *M* for a loan of $5,000. (a) How would you advise *M* to protect his loan by insurance? (b) Suppose he follows your method and a loss of $2,000 occurs. Show two ways in which the *X* Insurance Company may settle the loss.

17. What would be the settlement in Problem 16 if *M* were protected by a standard mortgagee clause?

18. The Alder Trust Co. lends Adams $9,000 on a first mortgage on his $17,000 house. Adams protects the Alder Trust Co. by taking a policy for $9,000 in the Alberta Fire Insurance Co., with a standard mortgagee clause endorsed thereon. Adams also borrows $3,000 from the Baring Trust Co. on a second mortgage on the same property, and protects the Baring Trust Co. by buying a policy for $3,000, with a mortgage clause endorsed, in the Brunswick Insurance Co. (a) A loss of $10,000 occurs. Show how this loss would be settled. (b) Suppose each of the mortgagees had its own policy, Adams being uninsured. A loss of $12,000 occurs. Adams later is unable to pay the interest or principal on the mortgages, and the property is sold under foreclosure for $9,000. What is the final situation of the parties?

19. The Alder Trust Co. lends Adams $9,000 on his $17,000 house. Adams protects the Alder Trust Co. by taking a policy for $9,000 in the Alberta Fire Insurance Co., with a mortgagee clause endorsed thereon. Adams also procures a $5,000 policy for his own protection, containing no endorsement for the benefit of the mortgagee, in the Brunswick Insurance Co. Show how a loss of $9,000 would be settled by these companies.

20. *O* has a property worth $20,000, on which he borrows on mortgage from *A* $10,000 and from *B* $8,000. He takes a policy for $10,000 in the Alberta Fire Insurance Co. and has endorsed thereon for *A*'s protection a mortgagee clause. He takes another policy for $8,000 in the Brunswick Insurance Co. and has a mortgagee clause endorsed thereon for *B*'s protection. While the policy is valid

a loss of $9,000 occurs. (a) Show the settlement of the loss. (b) What difference does it make in this case whether the mortgagee clauses are without or with full contribution?

21. *O* owns a quantity of grain in a warehouse, which he pledges as security for a loan. He desires to assign his fire insurance policy to the creditor. (a) What is the process? What is your opinion of the protection to the creditor? (b) Suppose this case was an instance of sale of the grain to the second party. Is his protection any better? (c) Suppose the policy was assigned to the second party after a loss had occurred?

CHAPTER 18

The Fire Insurance Contract

Standard fire policy. Unlike numerous other forms of insurance, fire insurance is carried on by means of a standard contract, prescribed by the law of the state in which the insurance is written. No other form of contract may be used, but the standard policy may be modified by endorsements to meet the conditions of the particular case.

A policy is the written evidence of the contract between the insured and the insurance carrier. Although an oral insurance contract would be binding, an insured is foolish to neglect written evidence of so important an engagement. As in the case of other contracts there is an offer and an acceptance. The offer is usually the insured's request for insurance, and the acceptance the signification of the carrier, usually through an agent, that it is willing to accept the risk. There must be a valuable consideration for the contract, consisting of the carrier's promise to pay indemnity and of the insured's payment of the premium. In order to be enforceable at law the insurance must be for the furtherance of a legal object, and the insured must be in such a position that loss or damage of the property would injure him.

This chapter does not presume to state the law on the fire insurance policy. Its object is conveniently to classify, illustrate, and show the reasons for and the probable significance of the terms of the fire insurance contract.

Development of the standard policy. In the early days of fire insurance every company issued a policy that suited its particular needs. Although at first policies were written largely at the home offices of the companies, the spread of the insurance idea caused more and more power to be placed in the hands of the agents, and in dealing with an insured many miles away, the company ran the risk of the agents' incompetence and the insured's dishonesty. The original simple policy accordingly became hedged about by a multitude of restrictions, policies lacked uniformity, and some companies attempted to devise policies that would impose as little liability upon themselves as possible. As stated in a court decision of the period, the provisions were of such bulk and character that they were not to be understood by men in general, even after laborious study. They were intermixed with subjects in which the premium payer had no interest, and some of the most material parts were concealed in a mass of rubbish on the back pages of the policy, where few would think of looking. As if it were feared that someone would, in spite of these difficulties, discover the meaning of the contract, the policy was printed in extremely small type and long crowded lines, so that "the perusal of it

was made physically difficult, painful and injurious." After a time, even the companies that issued the policies did not know their meaning because of the conflicting court decisions that were rendered, and loss settlements when several policies were written on the same property were almost impossible. There was therefore considerable agitation to establish a fixed form of policy.

The first standard policy form was adopted by the Legislature in Massachusetts in 1873, and in New York a standard form of policy was made the only permissible legal form in 1887 (although it became known as the "1886 form"). Eventually other states followed the example of New York until there were about 17 standard forms in use in various states. Of these, however, the New York standard policy was the most important, having been adopted as it stood by several states, and only slightly modified by others. The National Convention of Insurance Commissioners recommended a new standard form in 1914 which was adopted by three states, including Pennsylvania, and an amended Insurance Commissioners' form was adopted by New York and Wisconsin in 1918. Many provisions of the old New York policy had been nullified by court decisions, and some were considered to be unfair to the insured.

As the years went on, in view of (1) the leniency to the insured of court decisions on current policies, (2) the feeling that more modern conditions rendered older provisions harsh in their application to the insured, and (3) the desire by many for broader coverage and a more flexible contract, a committee of the National Association of Insurance Commissioners was appointed in 1936 to draft a new fire insurance policy contract, in the hope of universal adoption. As a result of the work of many committees and many organizations, the new New York Standard Fire Policy contract was evolved, which became effective in the State of New York July 1, 1943.

At the present time 40 states use the 1943 New York form. The following states do not: California, Iowa, Kansas, Massachusetts, Minnesota, New Hampshire, and Texas.

California, Iowa, and Kansas use their own special forms of policy, which differ considerably from the New York 1943 form. Maine, Massachusetts, Minnesota, and New Hampshire use the Massachusetts form, with each state having certain statutory differences. Texas uses a form that, although modeled after the 1943 New York form, includes many conditions usually found in separate forms attached to the policy. The New York 1943 form will be used here for detailed discussion of contract provisions because of its use in most of the states. At the end of the chapter are notes comparing other important standard forms.

The advantages of a standard form are: (1) Every company issues the same form of contract, which is merely modified by endorsements to meet the circumstances of the case; (2) The insured becomes educated to the meaning of the contract; (3) Law suits are greatly reduced in number; (4) Court decisions gradually fix the meaning of the terminology employed; (5) Discrepancies between different policies on the same risk are reduced and loss settlements made easier.

Provisions of the 1943 New York Standard Policy

Instead of studying the policy from first line to last, more satisfactory results will be attained if the policy provisions are grouped in their logical classifications and considered under the following heads: (1) the parties to the contract; (2) the premium and consideration; (3) the description of the property; (4) the extent of protection granted; (5) the inception and termination of the contract; (6) the suspension and voidance of the policy; and (7) the settlement of losses (in a later chapter).

Parties to the contract. One party to the contract is the insurance carrier, a stock, mutual, or other form of organization, as described in Chapter 3. The other party is the insured, who is to be indemnified in case of loss. The policy reads "Does insure John Doe and legal representatives." The name of the insured is an important part of the policy, for the contract is a "personal contract." By this phrase is meant that the policy is not an appurtenance of the property, following it everywhere and under all conditions, but a contract to reimburse a particular person or persons for loss under stated conditions.

It is of importance to the insured that the nature of his interest be fully and accurately stated in the policy. A mortgagee should be insured as "John Doe, first mortgagee," the seller under an executory contract of sale, should be so named, joint owners should be so named, and so on.

Following the name of the insured is the phrase, "and legal representatives," which is intended to cover the administrators or executors of an insured who dies during the policy term, or the person legally appointed to supervise the affairs of an insane or otherwise incompetent person. The inclusion of this phrase enables the insurance to continue as protection in case of death, insanity, or other incompetency of the insured.

With the exception of the policy form of Massachusetts, used also in several other New England states, prior to 1943 all policies in use in the United States were "sole and unconditional ownership" policies, which insured only sole and unconditional owners, unless endorsed specifically otherwise. The New York 1943 policy and other state policies patterned after it are "interest" policies, which cover any legitimate insurable interest, without special endorsement to that effect, for they contain no provision that the policy is void if the interest be other than "sole and unconditional ownership." The policies of New York, Massachusetts, and Texas, for example, are interest policies, whereas those of California, Iowa, and Kansas are sole and unconditional ownership policies.

The premium and consideration. One of the essential elements of a valid contract is a "consideration." The consideration given by the insurance carrier is the promise to provide indemnity, and the consideration given by the insured is the premium paid. Thus the policy states that the insurance is granted "in consideration of the provisions and stipulations herein or added hereto and of $ —— premium." The promises of the insurance company are conditional upon the fulfillment of the agreements of the insured, and when the policy form is prescribed by the

law of the state the insured may reasonably be expected to be acquainted with the stipulations of the policy.

The policy specifies the amount of insurance, the premium, and the rate, the latter being the premium per $100 of insurance. While the policy states the payment of the premium, such statement is not necessary for a valid contract, for, if the insurance company delivers the policy or binds the insurance, it is considered to extend credit to the insured for the premium. The amount of insurance merely measures the company's maximum liability and not necessarily its actual liability on any particular loss. The "stipulations" referred to are (1) that the insured will truthfully furnish certain facts, and (2) that he will avoid certain acts.

The premium may be paid by the insured in the form of cash or a note, but frequently he is extended credit by the agent of the company. In the latter case, as in the former, the contract is in full force and effect until canceled by the method provided in the policy. The principle that the company is bound when credit is given has even been extended to cover the case when the credit is afforded by a broker, if the latter is entrusted with the delivery of the policy. The theory of this latter interpretation is that when a person is entrusted with the delivery of the policy he may be considered as authorized by the company to extend credit for the premium. In such cases, of course, the agent or broker is responsible to the company for the premium.

In a mutual company the insured may be liable for an assessment, frequently limited to the amount of the premium, if necessary for the payment of losses occurring during the term of the policy.

In most states it is illegal for an agent or broker to return part of the premium to the insured by sharing the commission with him.

Description of the property. The policy must necessarily describe what is insured and where it is insured, for the policy is not ordinarily assumed to follow the property in various locations. This definition of kind of property and location of property is usually contained in a so-called *form,* which is treated of later in the chapter on *Forms.*

Inasmuch as the form describes what property is covered and where it is covered, it is a very important part of the contract. It not only is the principal factor in determining the premium but it also delimits the insured's coverage. The agent or broker receives a commission for furnishing experience and knowledge concerning forms, but the insured should scrutinize the form carefully, for he is often better informed concerning the nature and location of the property than the agent or broker.

The policy states that the insured property is covered "while located or contained as described in this policy . . . but not elsewhere." As will be seen later, however, the protection is also extended to property which is necessarily removed to preserve it from damage by fire. It is also important to note that the policy is made void by fraud or misrepresentation of the insured.

Extent of protection. It will be convenient to consider separately two aspects of the extent of protection afforded by the contract, namely:

(1) the *events* covered by the policy, such as fire damage, water damage, smoke damage, and the like; (2) the *amounts* covered by the policy, i.e., the definition of the sums that can be recovered by the insured in case of loss.

1. Events covered by the policy. The policy insures "against all direct loss by fire, lightning and by removal from premises endangered by the perils insured against in this policy except as herein provided." Loss means damage as well as destruction. Direct loss means that the property which is the subject of insurance must actually be damaged, and excludes liability for such indirect losses as inability to operate, loss of sales, loss of possible profit, and the like.

(*a*) *Loss by fire.* What is meant by "fire"? It involves a sufficiently rapid combustion to produce ignition and probably requires the presence of flame. The radiators of a steam-heated store may become so hot as to ruin the candy contained in the store, but there has been no fire.

The protection afforded by the fire insurance contract, furthermore, is only against *hostile* fires, as distinguished from friendly fires. The former is a fire in a place where it is not intended to be, whereas a friendly fire is one confined to the receptacle intended for it. Silk goods might be ruined by smoke and soot escaping from a disconnected or damaged stovepipe, but since the fire never left the stove, the insurance carrier is not liable. On the other hand, if a chimney catches fire, the company is liable for the resultant damage.

The coverage has been extended also to cases in which the fire does not actually reach the insured property, if a hostile fire is the *proximate cause* of the damage. The fire may be considered the proximate cause when there is an unbroken connection between the fire and the loss without the intervention of some new and independent cause. In one case an insurance company insured a plant and its equipment, including electrical machinery. A fire of negligible size and duration occurred in a waste basket, and came in contact with wires connected with the machinery, thus producing a short circuit that severely strained and wrecked most of the machinery in the building. It was held that the fire was a cause of the loss and, since the company had not limited its liability in this respect, it was compelled to pay. On the other hand, when a fire engine responded to an alarm of fire and on the way to the fire crashed into and damaged a building, the damage thus caused was held not covered by a fire policy.

It is evidently a matter of circumstances whether a fire is or is not the proximate cause of the loss, but it is evident that the fire need not actually reach the goods insured in order to cause a loss that is covered by the policy. Consequently two important and frequent forms of damage are covered by the policy, namely, damage by smoke from a hostile fire and damage by water used in extinguishing the fire. Explosions caused by fire will be considered later.

It is important to notice that there is nothing excusing the insurance carrier from liability for fires resulting from negligence of the insured, or negligence of some third party. Of course the company is not liable

if the fire results from the intentional act of the insured or such gross carelessness as may be considered misconduct. Furthermore the policy provides that the insured must exercise all reasonable means to preserve the insured property from damage by fire.

(*b*) *Loss by lightning.* Previously almost all fire policies were extended by endorsement to cover loss by lightning. Such coverage is now part of the 1943 standard form. If real or personal property is struck by lightning and damaged, regardless of whether or not fire ensues, the damage is covered under the policy.

(*c*) *Other perils.* Provision is made on the policy face for "extended coverage" perils to be included in the total premium charged for the policy. What the terms of this extended coverage are will be discussed later. They relate however to the perils of hail, tornado, earthquake, riot, riot attending a strike, windstorm, explosion, motor vehicle damage, aircraft damage, smoke damage (from heating apparatus).

Permission for the inclusion of these or any other perils in the policy is given by the lines:

38 **Other perils** Any other perils to be insured against or sub-
39 **or subjects.** ject of insurance to be covered in this policy
40 shall be by endorsement in writing hereon or
41 added hereto.

(*d*) *Removal of goods.* The policy also covers loss or damage caused "by removal from premises endangered by the perils insured against." This expression must be considered in connection with the provision that such property is covered "pro rata for five days at each proper place to which any of the property shall necessarily be removed for preservation from the perils insured against." This provision is an additional incentive to the insured to protect the company from unnecessary loss by saving and preserving goods that would otherwise become damaged. If a policy for $14,000 of insurance covered a $20,000 stock of goods on which a $5,000 loss occurred, and $5,000 worth of the remaining goods were removed to location *A*, and $10,000 worth to location *B*, 5/15 of the remaining insurance ($9,000) or $3,000, would follow the goods to location *A*, and 10/15 or $6,000 to location *B*. This insurance covers the property for five days, which is considered a sufficient length of time for the owners to obtain a new policy covering the property in the new location.

2. Events excluded by the policy. The losses described above are covered under the policy "except as hereinafter provided." Certain events make the policy of no effect.

11 **Perils not** This Company shall not be liable for loss by
12 **included.** fire or other perils insured against in this
13 policy caused, directly or indirectly, by: (a)
14 enemy attack by armed forces, including action taken by mili-
15 tary, naval or air forces, in resisting an actual or an immediately
16 impending enemy attack; (b) invasion; (c) insurrection; (d)
17 rebellion; (e) revolution; (f) civil war; (g) usurped power; (h)
18 order of any civil authority except acts of destruction at the time

19 of and for the purpose of preventing the spread of fire, provided
20 that such fire did not originate from any of the perils excluded
21 by this policy; (i) neglect of the insured to use all reasonable
22 means to save and preserve the property at and after a loss, or
23 when the property is endangered by fire in neighboring prem-
24 ises; (j) nor shall this Company be liable for loss by theft.

For losses noted as (a) to (h) the company is not liable because such losses are not contemplated or charged for at the time the policy is issued. Separate insurance may be obtained against insurrection, civil commotion, and war risk by payment of additional premium, but most people do not care to pay a higher rate for fire insurance in order to include those risks under a fire policy. In some cases, furthermore, the injured party may have redress against the municipality or state.

Acts of destruction by civil authorities to prevent the spread of conflagration are covered, however, unless the fire originated from one of the perils excluded under the policy. Assume, for example, that authorities are forced to destroy a building in an attempt to stop the spread of fire caused by a rebellion. The fire policy on that building would not make good the loss, since rebellion is one of the excluded perils. Loss by civil authority other than in preventing the spread of a fire would be, for instance, the action of a health officer in setting fire to a building in order to prevent the spread of disease.

Losses by theft are specifically excluded from coverage, inasmuch as the insured might be expected to take means to prevent such losses and because, under the laws of some states, a fire insurance company cannot cover this risk. Theft insurance is available for this purpose.

36 (c) as a result of explosion or riot, unless fire ensue, and in
37 that event for loss by fire only.

If the fire precedes the explosion or riot, therefore, and the explosion or riot is caused by the fire, the company is liable for the entire loss. If the explosion or riot precedes the fire, the company is liable only for the damage done by the fire. This provision has led to great confusion, partly because it is difficult to establish the facts in such cases and partly because fires and explosions are merely combustion with different degrees of rapidity. The exclusion as to riot and explosion losses can, however, be suspended by the company by written endorsement attached to the policy.

In addition to the exceptions expressed in the contract certain exceptions are implied by law. (1) Losses brought about by the intention of the insured are not covered, but even gross carelessness is not necessarily proof of intent to produce a loss. (2) Losses incurred by certain illegal acts are not recoverable, especially when the property itself is illegally owned or is used for illegal purposes.

3. Articles excepted by the policy. The form attached to the fire insurance policy may insure property not forbidden by the standard policy, and if general terms are used in the description much property may be

included by implication. Such expressions as "stock contained in said buildings" and "all such articles as are usually carried for sale" are often used, but may be either disappointing to the insured because of their vagueness or embarrassing to the agent because of their inclusiveness.

Certain kinds of property, however, cannot be covered by a fire policy. Thus it is stated that:

7 **Uninsurable**	This policy shall not cover accounts, bills,
8 **and**	currency, deeds, evidences of debt, money or
9 **excepted property.**	securities; nor, unless specifically named
10	hereon in writing, bullion or manuscripts.

An examination of this list of articles shows that either (a) they may be easily concealed or removed and thus lend themselves to fraud, or (b) their value is difficult to determine. It would be hard to prove the amount of money destroyed by a fire, or to trace the removal of money or securities prior to the fire. The value of a deed to property is problematical, for though the instrument may be on public record it has some value in itself. Evidences of debt, such as promissory notes, are of uncertain value, depending upon the credit of the promisor.

Bullion or manuscripts are included in the coverage only if specifically named as being included. The reason is the same, that their value may be very difficult to determine and lead to disagreement in the settlement of a loss involving them. The company may, however, accept liability on these items, presumably after having agreed in writing upon their value with the insured.

4. Amounts covered by the policy. The contract makes the company liable "to an amount not exceeding $———." The entry must be construed only as the maximum amount for which the company can be held liable, its actual liability in particular cases often being much less, even when total destruction results from the fire. This variance is explained by the clause following: "does insure to the extent of the actual cash value of the property at the time of loss."

(*a*) *Cash value.* Nothing could be clearer in theory than the expression, "actual cash value," but few things are more difficult to determine in practice. The circumstances of every case make it seem a special problem to which no general rule is applicable. It is evident that the meaning of the contract is not affected by the amount of insurance on the property or the value of the property at the time the policy was issued, but depends upon the actual loss suffered by the insured at the time of the fire.

To allow the insured to recover the original value of real estate that has depreciated, of machinery that has been subject to wear and tear, of goods that have lost a large proportion of their value because of changing styles, of articles that have become almost worthless, would be for the insurance company to pay for losses that were not caused by fire. Such prodigality would simply furnish an incentive for the destruction of property, because more could be recovered as insurance than the undamaged property was worth. Even under present conditions it is found

that business depressions, which reduce the values of buildings and stocks of goods, are sometimes accompanied by large increases in the fire losses. Such conditions furnish an incentive for a fire.

The actual cash value of property is the material value of such property and not the subjective value that a particular person may place upon a piece of property because of affection or sentiment. Scarcity may, of course, give an object market value, as in the case of a postage stamp desired by collectors, but a high personal valuation is not sufficient.

The actual cash value to the insured is furthermore dependent upon the stage of ownership that the property has reached in its transfer from manufacturer to consumer at the time of the loss. In a mill warehouse, a barrel of flour is valued at the cost of production exclusive of profit, because the ordinary insurance contract does not cover profit. In the hands of a wholesaler or dealer, the cost of production of the flour has been increased by the addition of the manufacturer's profit (which is cost to the dealer) and freight charges. When the flour reaches the retailer, the value has been further increased by the dealer's profit, and in the hands of the consumer it is worth its full retail price.

Cash value often really means the cost of replacing an object with new property at the time of the loss, less depreciation.

In general, for real property the estimate is based upon the actual value of the building in the condition at the time of the fire, allowing for depreciation or appreciation. The estimate is not necessarily the original cost, the amount required to erect a new building, or the cost of repairing or replacing the same. For personal property the estimate is based upon the fair cash price for which the property can be sold in the market at an ordinary sale, at the time and place of the loss. On raw materials currently quoted the market quotations are usually considered as the cash value.

A fact that seldom comes strongly to the attention of the insured is that the provisions of the policy under discussion throw upon the insured the burden of maintaining a proper amount of insurance. If he overinsures, he faces the probability of paying premiums for nothing, because he cannot collect more than his loss. If he underinsures, he comes in conflict with the coinsurance clause customarily added to policies, which is described later in the chapter on *Clauses*. Nevertheless the insured, usually from ignorance or carelessness, seldom keeps any close watch upon the relation between values and insurance, erring as often in one direction as in the other.

In spite of the theory explained above, numerous states have passed "valued policy laws." A valued policy is one in which the value of the property is agreed upon when the contract is made and not when the loss occurs. Although such contracts are common in marine insurance, they are used in fire insurance only for covering property whose value is difficult to determine at the time of the loss, such as works of art, instruments, manuscripts, drawings, and the like. The state laws referred to make every policy on real estate a valued policy, so that if a property is totally destroyed the insured is entitled to claim the full amount of insurance

regardless of the value of the property at the time of the loss. These laws do not apply to partial losses. Insurance companies, therefore, must shoulder the burden of watching the values of all properties insured, in addition to the incentive for arson provided. Such laws have a tendency to increase fires. The insurance premium, of course, must be sufficient to cover these costs. In most of the states where valued policy laws exist, the right of the company to rebuild the property is denied.

(*b*) *Repair or replacement cost.* The amount considered as the loss is further limited, as to the liability of the company, to "not exceeding the amount which it would cost to repair or replace the property with material of like kind and quality within a reasonable time after such loss."

Notice, first, that this is simply a limitation upon value for insurance policy purposes. The phrase quoted is not a requirement to be met by either party. The company cannot force the policyholder to replace the property within a reasonable time after the loss or within any time; nor can the insured demand that the company do so.

What constitutes replacement cost depends upon the property and circumstances involved, as we have seen in the discussion directly above of actual cash value.

(*c*) *No allowance for increased costs.* The contract provides that the loss shall be settled "without any allowance for any increased cost of repair or reconstruction by reason of any ordinance or law regulating construction or repair." Many cities have enacted ordinances intended to prevent the further use of features of building construction that contribute to fire hazard. Roofs might be taken as a good example. In the event of the destruction of the roof, it may be necessary by reason of the law to replace it with a type of roof costing considerably more, and the additional cost is a loss for which the company is not liable. In places where such laws are strictly enforced, the companies assume the responsibility by endorsement, charging an additional premium therefor. In Massachusetts the policy does not contain this exception, and the insurer would be liable for the increased cost, but it is customary to attach a "disclaimer clause" to the policy, exempting the company from liability, unless the insured secures another endorsement called the "demolition clause," in which the company agrees to assume liability.

(*d*) *Consequential losses.* The insurance company, as we have previously seen, assumes liability for direct loss by fire but not for consequential losses. The policy states that the loss will be settled "without compensation for loss resulting from interruption of business or manufacture." The insured can recover the cash value of the property destroyed, but if it is some time before the property is again in its former condition and he thereby loses money through inability to operate, through the loss of contracts or the deprivation of profits that he might otherwise have made, the insurer is not liable for these latter losses. Such losses may be protected against by obtaining use and occupancy insurance, business interruption indemnity, rent or profits insurance, but are not covered by the usual fire insurance policy. These forms of in-

surance may be provided for by endorsements on the fire policy or by separate contracts, and will be referred to in a later chapter.

(*e*) *Interest of the insured.* The policy states that, regardless of all other provisions, it is not liable for more than the amount that represents the interest in the property of the insured named in the policy. Suppose, for instance, that a house is owned by a husband and wife as co-owners. A policy is requested, however, written in the name of the husband only. Regardless of all other policy arrangements as to the amount payable when a loss occurs, the company is not liable for more than the amount of the husband's individual interest in the property. If the house therefore is worth and is insured for $10,000, and the husband's interest is $5,000, in case of a total loss the company would not pay more than $5,000.

It is important, therefore, that all interests be named in a policy.

(*f*) *Pro rata liability.* Finally, in connection with the amount for which the company is liable in the event of loss, we must consider the case in which the same property is insured in several companies, as is frequently done with large risks. Suppose, for example, a property worth $400,000 is insured in company *A* for $300,000 and in company *B* for $100,000. The policies of both companies provide that

> **Pro rata liability.** This Company shall not be liable for a greater proportion of any loss than the amount hereby insured shall bear to the whole insurance covering the property against the peril involved, whether collectible or not.

In our illustration, company *A* is liable for three quarters of any loss and company *B* for one quarter of any loss. According to the last phrase of the provision, if company *A* should become insolvent and able to pay only 50 cents on the dollar, company *B* cannot be relied upon to make up the balance, and the insured will consequently receive only three eighths of the loss from company *A* and one quarter of the loss from company *B*, losing the remaining three eights of the damage because he selected a weak company. Were the pro rata provision omitted, the property owner would take a small amount of insurance in a strong company and the balance of the value he would insure with weaker companies at lower rates, depending nevertheless upon the strong company to pay any sums that the weaker companies might be unable to pay.

The words "whether valid or not," contained in the New York 1918 policy in addition to the above, are omitted in 1943, it will be noted. Whether this will result in any difference in legal interpretation remains to be seen.

The pro rata liability clause applies to two or more policies covering the same insurable interest in the same property, and not to two or more policies covering different insurable interests. The customary methods of settlement in this latter instance have been described in connection with the insurance of mortgagees in the preceding chapter. But if the policies cover the same interest in the same property, it is of no conse-

quence that this interest be described in different words (for example, as owner and also for account of whom it may concern), or that some policies cover more or less of the property than others.

Inception of the insurance. From the standpoint of the insured, the vital element is the determination of the moment when the contract with the company takes effect, that is to say, when the insurance begins. The acceptance of the risk by the company is the act that determines this moment, and delivery of the policy, although excellent evidence of this fact, is not essential. An agent may bind the company by the statement that the policy will be issued, and many cases have arisen in which the mailing of a policy was considered acceptance of the risk, because the post office is considered the agent of the insured and acceptance indicated to it is acceptance indicated to him.

Although an agent can bind the company by an oral agreement, it is customary, when immediate and temporary protection is desired, to issue a "binder" as written evidence of the contract. To quote the words of one case, "The binding slip is a short method of issuing a temporary policy for the convenience of all parties to continue until the execution of the formal one." If the binder merely stated that the company insured a certain interest on certain property, the contract would be considered to embody the usual terms of a fire insurance policy and the customary rate. But the printed form used covers this specifically by stating that the terms of the policy regularly issued in the state are to govern this transaction, except as otherwise stated in the binder. The binder is restricted to a short period, usually 15 or 30 days, and it is important to note that, unlike an oral contract, the insurance ceases at noon on the day after the risk is declined. Under the formal policy the company can terminate its liability only after a five-day notice to the insured.

The policy states that the company "does insure for the term of .....from the.....day of..... 19....at noon, to the.....day of..... 19....at noon, standard time, at location of property involved."

The word "noon," without any qualifying adjective in the old forms, occasioned disputes as to whether it meant solar or standard time. Earlier decisions held to the former view, but more recent cases decided in favor of standard time.

Renewal. The New York 1886 policy contained a provision that the contract might be continued by renewal, but the parties may, of course, continue their relations without such a provision. No such provision exists in any of the other forms we have referred to, nor in the present New York form. It was formerly the practice to issue a renewal receipt that was a receipt for the premium and also evidence of the continuance of the contract, but the more common practice now is to issue a new policy. Especially when changes of amount, location, or hazard have taken place, a new policy is preferable.

The renewal, by either method, has been said in law cases to be a new contract on the same terms as the old. If the insured had violated the original contract, he would have a good contract in the new policy until

he had broken its terms. But the precise meaning of the expression "on the same terms as the old" is left in doubt by somewhat inconsistent court decisions on particular issues. Although one decision held that the insured could assume that the new contract contained the same clauses as the old one without reading it, another decision held that an oral consent by an agent to waive one of the provisions of the original policy did not operate as a consent under the renewal contract. However this may be, it is evident that the insured will be wise upon each renewal to examine the endorsements to see that the new contract comprises the terms he expects. At the time of renewal the insured is bound to disclose to the insurance company any increase in hazard that has taken place.

Termination. A policy may be terminated in four ways: (1) by the occurrence of some event named in the policy; (2) by expiration of the term without renewal (which requires no further discussion); (3) by cancellation; and (4) by violations that suspend or void it.

The face of the fire policy, unlike some other insurance policies, is diminished by the amount of the loss paid. If a $5,000 policy is issued on February 1, on which a $2,000 loss is paid on April 1, the policy continues for only $3,000, unless "reinstated" to its original value by payment of additional premium. If another $3,000 loss were to be paid on October 1, the entire policy would be exhausted, and terminate.

The policy provides for cancellation upon the initiative of either the insured or the company, but with differing conditions in the two cases. As to the insured the policy provides:

> **Cancellation of policy.** This policy shall be cancelled at any time at the request of the insured, in which case this Company shall, upon demand and surrender of this policy, refund the excess of paid premium above the customary short rates for the expired time.

The notice given by the insured may be either oral or written, but in it the decision of the insured to cancel must be plainly expressed. The cancellation will be effective as soon as the notice reaches the insurer, although the premium may not yet have been returned. An insured is bound by the acts of his broker, if the latter has general powers to deal with insurance matters on behalf of his client, but not if the broker's authority is limited to procuring insurance.

The insured, if he cancels the policy, must pay the "short rate" for the expired time, a rate that is higher than the pro rata premium would be for the same period. If the insured cancels after the policy has been in existence for four months, he must pay (for example) 50 per cent of the annual premium, as specified in the established "short rate table" of the company, instead of the 33 per cent pro rata rate. The additional charge is argued to be justifiable because of the expense that the company incurred in writing the policy. Probably a more important reason for the large excess is to discourage cancellations.

If an insured has two policies that are similar, except that one has run longer than another, it would appear that it is better to cancel the policy

of longer duration, if one is no longer needed. If one is cancelled in order to replace it with another policy, however, it is better to cancel the policy of shorter duration.[1]

It is customary for term policies of 2, 3, 4, and 5 years' duration to be issued at 1.75, 2.5, 3.25, and 4 times the annual rate, respectively. The question naturally arises: how much saving is there for the insured at the term rates? To pay $2.50 at once, instead of $1.00 a year for three years, when interest is zero, obviously saves $0.50. If money is worth 30 per cent a year, however, the reduction for the advance payment does not compensate for the use of the money.

Whatever the rate of interest assumed, a comparison may be made either by reducing the advance payment to equivalent annual payments or by finding the present value of the annual premiums. The latter is easier for a comparison on an annual basis. For example, $2.50 in advance is substituted for $1.00 a year in advance for three years. From interest tables it is found that at 5 per cent $1.00 a year in advance for three years is equivalent to $2.85941043. Therefore the term premium of $2.50 is equivalent at 5 per cent to three annual payments in advance of $0.8743 (2.50/2.859), or an annual saving of $0.1257 on each annual premium of $1.00. But at 4 per cent interest the greatest saving would be a 4-year policy, whereas at 6 per cent interest the greatest saving is on a 3-year policy.[2]

[1] In the usual short rate table, for example, a short rate of 20 per cent is prescribed for one month's insurance, and 70 per cent for six months' insurance. If the rate is $1.00, the one-month policy, if canceled, will cost $0.20 per month, whereas the six-month policy, if canceled, will cost $0.117 per month.

If the canceled policy is replaced by another policy, and it together with the uncanceled policy is to expire on the *same future date*, say 30 months hence, we have the following illustrative calculation, the short rates being marked (SR):

One-month Policy		*Six-month Policy*	
1 month.....	$0.20 (SR)	6 months.....	$0.70 (SR)
12 months.....	1.00	12 months.....	1.00
12 months.....	1.00	12 months.....	1.00
6 months.....	.70 (SR)	6 months.....	.70 (SR)
31 months.....	$2.90	36 months.....	$3.40
per month.....	.09354	per month.....	.09444

If the canceled policy is replaced by another policy, and both insurances are to run the *same length of time*, say three years, we have:

One-month Policy		*Six-month Policy*	
1 month.....	$0.20 (SR)	6 months.....	$0.70 (SR)
12 months.....	1.00	12 months.....	1.00
12 months.....	1.00	12 months.....	1.00
11 months.....	.95 (SR)	6 months.....	.70 (SR)
36 months.....	$3.15	36 months.....	$3.40
per month.....	.08750	per month.....	.09444

[2] In the absence of a table see the discussion of the present value of an annuity due on pages 144-145.

$$a_n = a_3 = \frac{1 - [1/(1+i)^{n-1}]}{i} + 1 = \frac{1 - (1/1.05^2)}{.05} + 1 = \frac{1 - .907029}{.05} + 1 = 2.8594$$

Thus the following table of percentage savings on the annual premium may be arrived at for various rates of interest:

As to the company, the contract

> may be cancelled at any time by this Company by giving to the insured a five days' written notice of cancellation with or without tender of the excess of paid premium above the pro rata premium for the expired time, which excess, if not tendered, shall be refunded on demand. Notice of cancellation shall state that said excess premium (if not tendered) will be refunded on demand.

The notice must be in writing and it must be definite. The period of notice begins upon receipt of notice by the insured, and is measured from midnight of the day of receipt to midnight of the fifth day following. Deitch and Wood states that notice of cancellation served upon a broker is binding upon the insured only in those cases in which (a) the policy is as yet in the hands of the broker, awaiting delivery; or (b) the insured, after knowledge of the cancellation, makes no objection thereto or accepts other insurance; or (c) the insured delivers the policies to the broker to be returned.

The principal points with respect to the cancellation by the company are, therefore: (1) that the notice must be written; (2) that the policy will be in force until the expiration of the notice period; (3) that the notice must state that the excess premium is or will be refunded; (4) that only the pro rata portion of the premium shall be charged for the expired time; and (5) that all persons named as covered shall be notified if the cancellation applies to them.

Another situation affecting termination of the contract by the company exists where a mortgage interest is named as the loss payee, in whole or as that interest may appear. For the contract states that:

> **Mortgagee interests and obligations.** If loss hereunder is made payable, in whole or in part, to a designated mortgagee not named herein as the insured, such interest in this policy may be cancelled by giving to such mortgagee a ten days' written notice of cancellation.

This advantage given the mortgage interest has already been discussed in the previous chapter.

Although neither the insured nor the company is required to give reasons for cancellation, the principal reasons for cancellation by the company are increase of hazard, bad physical or moral hazard, unsatisfactory loss ratio, overinsurance, and nonpayment of premiums.

In addition to termination by fire, expiration, or cancellation, the policy may be subject to *suspension* for some violations, and permanent *voidance* for others.

	3%	3½%	4%	4½%	5%	5½%	6%
2-year policy.....	11.207	10.995	10.784	10.575	10.366	10.158	9.951
3- " "	14.192	13.784	13.378	12.973	12.569	12.167	11.767
4- " "	15.113	14.511	13.909	13.309	12.711	12.112	11.517
5- " "	15.202	14.403	13.605	12.807	12.010	11.213	10.416

Suspension. Conditions entailing suspension are only three in number, illustrating the liberalizing effect of the 1943 policy.

> Conditions suspending or restricting insurance. Unless otherwise provided in writing added hereto this Company shall not be liable for loss occurring
> (a) while the hazard is increased by any means within the control or knowledge of the insured; or
> (b) while a described building, whether intended for occupancy by owner or tenant, is vacant or unoccupied beyond a period of sixty consecutive days; or
> (c) as a result of explosion or riot; unless fire ensue, and in that event for loss by fire only.

As to increase in the hazard, it would seem that this clause was introduced in the policy to cover all the rather obvious changes that might occur in the physical or moral hazard of the risk, as distinguished from other changes that might appear inconsequential to the insured. Such a view has been taken by the courts, except with respect to the moral hazard. Consequently, changes in occupancy such as renting a storeroom to be used as a printing office, changes in operations such as running a distillery instead of a brewery, and modifications of exposure such as putting up a frame shed containing a stove have been held to be policy violations. Generally it has been necessary for voidance that the changes be substantial and more than temporary. Moral hazard has been differently treated by different courts.

"Vacancy" has been considered as meaning the absence of any person or thing, whereas "unoccupancy" refers to the absence of persons; but either of these conditions is sufficient to suspend the policy. This provision has in the main been held valid by the courts. Experience shows that the hazard is increased by vacancy or unoccupancy, inasmuch as under such circumstances there is no one on the premises by whom the presence of fire may be promptly detected. Vacancy or unoccupancy also increases the danger of accidental fires caused by irresponsible persons.

The company insures the property "while located or contained as described in this policy, or pro rata for five days at each proper place to which any of the property shall necessarily be removed for preservation from the perils insured against in this policy, but not elsewhere." The policy is thus suspended, according to its terms, while the property is not in the location described. Although the language employed could hardly be stronger or clearer, the courts have been lenient toward the insured. In different jurisdictions varying decisions have been rendered. For instance, a policy on a carriage destroyed while out for repairs was held valid on the ground that the company must have contemplated the moving of the carriage for this purpose when it wrote the policy; but in another case a policy on a fire engine was declared void because the engine was destroyed while at a fire. In general, it would seem equitable to take into account the nature of the subject of insurance, although such consideration may give rise to difficult cases in practice. An insured

desires prompt reimbursement in case of loss, and not a lawsuit, and he should therefore be careful (1) to see that the location is correctly and adequately described in the policy, and (2) to secure an endorsement if the location of goods is changed.

In old policies it was the general practice to provide that the policy was void *if* the insured violated certain stipulated conditions. This provision existed in the New York 1886 policy, which is currently used in some states. The question has often arisen whether the policy revived and again became valid when the violation ceased. The companies have contended that the language meant that the policy was permanently ended, but the courts have been favorable to the insured and have frequently ruled that the policy was reinstated and the insured's protection renewed when the violation ceased. In the New York 1918 policy and the 1943 policy, therefore, certain violations are stipulated to suspend the policy *while* they exist, but not to terminate the insurance.

Another policy provision that may possibly lead to suspension is the following:

> **Other Insurance** Other insurance may be prohibited or the amount of insurance may be limited by endorsement attached hereto.

Other policies of insurance on the same property are not prohibited ordinarily, but the company may enforce this right of limitation by stating so in an added endorsement. Violation of the prohibition in the endorsement would void the policy. The underlying reason for giving the company this right is to prevent overinsurance of particular classes of property. As a matter of fact, all previous standard forms *prohibited* other insurance without consent, and the company often eliminated this prohibition by endorsement. When the prohibition was violated there was much dispute about which policies were void and which were valid.

It will be noted that this prohibition refers only to other contracts of insurance taken out by the insured, and its object is not to prevent several different interests in the same property from being insured, but to prevent the same interest from securing several different policies without the knowledge of the companies. The clause, if in operation, does not prevent the owner and a mortgagee from obtaining separate policies, nor an owner from obtaining separate policies on building and contents, nor the same party from securing separate fire and tornado policies on the same property.

Voidance. The policy states that:

> **Concealment, fraud** This entire policy shall be void if, whether before or after a loss, the insured has wilfully concealed or misrepresented any material fact or circumstance concerning this insurance or the subject thereof, or the interest of the insured therein, or in case of any fraud or false swearing by the insured relating thereto.

By this clause the 1943 policy is confined to two conditions for voidance, eliminating five or six other conditions that the 1918 policy contained. Statements and promises of an insured have different degrees of significance, depending upon whether they are representations or warranties.

1. Representations. A representation is a statement made by an applicant for insurance to the insurer, before making the contract, about the subject matter insured. Misrepresentations are stated in the policy to render the fire insurance policy void. A representation, whether oral or written, it will be noted, is not part of the contract itself, although it may be an inducement to enter into the contract. A statement intended by one party to be part of the contract may, by court decision or statute, be held to be only a representation.

In order to prove that a statement is a misrepresentation it is necessary to show that the statement was (a) false (i.e., substantially false) and (b) material. A statement that the prospective insured had $20,000 insurance on the same property in other companies, when in fact he had but $5,000, is a misrepresentation. That an untrue statement is made innocently does not prevent it from being a misrepresentation. When a broker, for example, who represented the insured, overstated the existing insurance on the building, quoting by mistake the amount of insurance on the contents, his statement was held to be a misrepresentation. Statements of belief, opinion or expectation are not likely to be considered misrepresentations. The New York 1943 policy penalizes only *willful* misrepresentations.

Fraud is a misrepresentation known to be false by the person making the statement, and may occur before the contract is entered into or in claims made concerning the nature and amount of the loss.

2. Warranties. A warranty is a condition named in the contract, of such a nature that its nonexistence is a potential cause of loss. It will be noted that, unlike a representation, a warranty is part of the contract. One common warranty in a fire insurance contract is that relating to increase of hazard. The fire policy is voided or suspended by a breach of a warranty.

The warranty is broken if the condition warranted to be nonexistent does in fact exist, as in the example above, or if the condition warranted to exist is not present, as, for example, when an insured does not maintain a watchman service as warranted in an endorsement. The general principle of the common law is that the warranty need not concern a material fact in order for the breach to void the contract; it is only necessary that the statement be false.

The hardship upon the insured resulting from the obvious opportunity given to the company to make every statement a warranty has been softened by the attitude of the courts and by the passage of statutes. Courts in legal decisions have held that *oral* statements are inadmissible as evidence, except as to modifications or renewals of the contract, and that warranties must be *attached to* the contract. Informal and descriptive statements must concern matters that are material. To be a con-

tinuing rather than merely an affirmative warranty, the language must clearly so indicate, and substantial rather than utterly complete compliance therewith is sufficient. Conditions to be performed after a loss have been construed more leniently than those applying before a loss. The knowledge of the insurer of usages and customs and the doctrine of divisibility of the contract have also been adduced as excuses for the insured. In short, results have been influenced by what is considered to be a warranty and what constitutes compliance therewith.

To some extent the law on warranties has also been modified by statutes favorable to the insured, although the application of these to fire insurance is very limited. (a) In some states laws have been passed providing that all statements of the insured are representations and not warranties, but very few of these statutes apply to fire insurance contracts. (b) In a few states also there are statutes which provide that the breach of conditions in a policy does not void the policy unless the breach contributes to the loss or (in other statutes) increases the risk of loss.[3] (c) In one instance a statute provides that the difference between the actual condition and the condition as represented must contribute to the loss in order to void the policy, but that such difference will reduce the amount of insurance to what the premium would have purchased under the actual conditions.[4]

Waiver provisions. The policy states:

> **Added provisions.** The extent of the application of insurance under this policy and of the contribution to be made by this Company in case of loss, and any other provision or agreement not inconsistent with the provisions of this policy, may be provided for in writing added hereto, but no provision may be waived except such as by the terms of this policy is subject to change.
>
> **Waiver provisions.** No permission affecting this insurance shall exist, or waiver of any provision be valid, unless granted herein or expressed in writing added hereto. No provision, stipulation or forfeiture shall be held to be waived by any requirement or proceeding on the part of this Company relating to appraisal or to any examination provided for herein.

Anyone would justifiably suppose from these statements that in order to modify the terms of the contract the insured must secure a written endorsement on the policy. Nevertheless the law on the subject is so uncertain that one writer has said of a similar provision in the New York 1918 form that "this provision might as well have been left out of the standard form." The origin of its uselessness lies in the application of

[3] For example, the Michigan form of policy includes the statement: "This company may not base a defense on any breach of the conditions of the policy to be performed by the insured prior to loss or damage, unless such breach exists at the time of the loss or damage, or contributed to the loss or damage, or to the amount thereof."

[4] An amount impossible to estimate in many forms of insurance.

the legal doctrines of "waiver" and "estoppel." Since even the courts do not know what these terms mean, only a few hints can be expected in this discussion.

An agent's powers are frequently broader than are supposed. The principal will be bound, not only by acts of the agent within the scope of his authority, but also by such acts as are necessary, proper, or customary in carrying out the authorized agency. Moreover, the agent's authority to act in the future may be increased by an implied power to act, supplied by the acquiescence of the insurance company in the past. Furthermore, the insurance company will be bound by the agent's acts if the agent has *apparent* authority for such acts, and the insured is not affected by limitations on the agent's authority of which the insured has no notice.

These statements may be illustrated by a hypothetical case. The *X* Insurance Company appoints *A* its agent, and *A* negotiates with *B* for a policy of fire insurance to cover *B*'s house. The company has said nothing to *A* regarding extension of credit to *B* for the premium, but such practice is common in the business. If *A* extends credit, and signs and delivers the policy, the company is bound. The *X* company becomes aware that *A* is extending credit for premiums and neither orders him to stop nor warns the insured that the practice is unauthorized. Thus not only is the past act ratified, but the agent's powers are strengthened for the future. The insured *B* now asks *A* whether *B* can leave the insured house unoccupied for 30 days, and *A* says *B* can do so without voiding his insurance. Since *A* has been given the power by the *X* company to sign and issue written documents, surely (the insured thinks) he can change some small part of what he has created! Thus begins a doctrine that an agent can abandon a right given to the company by a policy stipulation (waiver) or make a statement or promise that the insurance company is not allowed later to deny (estoppel).

But the insurance company, in order to notify the insured of the true situation, has inserted in the policy a provision (previously quoted) specifically designed (1) to allow waiver by agents of only certain parts of the contract and (2) to allow such waivers only if in writing. Even this precaution, however, may be insufficient to withstand the doctrines of waiver, estoppel, and ratification. In Federal and in several state decisions the provision has been held effective, but in other state decisions its effect has been nullified or limited. In New York courts, the view is held that the insured does not know about the nonwaiver clause until the policy is issued and that, therefore, unauthorized waivers or estoppels have no effect thereafter but may be effective before or at the issuance of the policy.

To extend the possibilities of doubt still further, the policy provision does not and can not deny that the knowledge of the agent is the knowledge of the company. Finally, some decisions have said that an agent can orally waive the very clause which says that he can not!

1. At the time of the issuance of the policy. Most of the state courts hold that the agent has power to waive provisions of the policy orally

and to bind the company by his knowledge of existing conditions. For example, if the insured is operating his factory at night and tells the agent so, and if the agent says, "That is all right," and issues a policy whose terms prohibit overtime operation without any endorsement permitting it, the company is nevertheless bound. The Federal courts and a few of the state courts have held for the insurance company under these circumstances. A few western states have even held that the issuance of a policy without inquiry waives provisions regarding ownership, presence of a chattel mortgage, or location of the building on leased ground.

2. After the issuance of the policy but before a loss. Here the decisions depend upon (a) the authority of the agent, (b) the nature of the provisions allegedly waived, and (c) the circumstances of the waiver. Although a general agent may have real or apparent authority orally to waive the conditions of the policy, courts have frequently held that local agents do not. Even if an agent has power to waive some conditions of the policy, he may or may not have authority to waive others. For example those conditions that are indicated as inflexible, because they are not accompanied by the words "unless otherwise provided in writing," may be more stringently required than those that are not so indicated. If the agent makes only a vague statement about the breach of a policy condition, his statement may be insufficient to bind the company, but if he informs the insured that he has remedied the situation by placing an endorsement on the policy, the insured is entitled to rely on the statement without reading the policy.

3. After occurrence of loss. Inasmuch as the event has already happened, the courts are liberal in recognizing waivers of conditions that apply after a loss. If an agent denies that the company is liable on the loss, this denial relieves the insured from presenting a proof of loss within the time limit specified in the policy. If the agent induces the insured to refrain from bringing suit within the time specified in the policy, the company is estopped from requiring compliance with this condition. It has even been said that anything more than a mere investigation of the facts and requirement of formal proof of loss may constitute a waiver.

For the purpose of leaving adjusters of losses freer to act, insureds are sometimes induced to sign nonwaiver agreements, providing that the actions and words of the adjuster or agent of the company shall not constitute a waiver of any of the conditions of the policy. These agreements are considered by some not of much effect because of their language and because of lack of consideration therefor.

Subrogation. This right is a settled principle of insurance.

> **Subrogation.** This Company may require from the insured an assignment of all right of recovery against any party for loss to the extent that payment therefor is made by this Company.

The right of subrogation may be defined as the right of an insurance company, after paying a loss to the insured, to acquire all rights related to such loss possessed by the insured against third parties, to the extent

of the loss payment. These rights may be legal, equitable, and perhaps contractual.

The effect of inserting the specific provision into the policy is that the subrogation right is made a part of it with the result that: (1) the company may demand from the insured a written assignment of his rights; and (2) the insured may not part with such rights after the insurance contract is issued without voiding it. When the insured finds it necessary to waive some of his rights against third parties, as for example in the case of railroad sidetrack agreements, he may secure at extra expense an endorsement on the policy in the form of a subrogation waiver.

An example of the right of subrogation is found when a fire is caused by the negligence of a third party, for which negligence the party whose property is damaged may recover at law. If the person damaged collects from the insurance company, however, the right to recover from the negligent third party passes to the insurance company. A policy of insurance issued to a tobacco company covered, among other items, several thousand dollars' worth of unused internal revenue stamps. These, with other property, were lost and the insurance company paid the loss. Under United States' statutes the stamps were redeemable from the United States Government, and the underwriters, having paid the loss, claimed and received reimbursement from the Government.

There are two principles upon which the doctrine of subrogation rests: (1) the wrongdoer should suffer the loss, which is applicable only to cases involving fault; (2) the insured is not entitled to profit from the loss but should be reimbursed only for the amount of loss suffered.

With respect to provisions relating to mortgage interests, the policy contract states:

> If this Company shall claim that no liability existed as to the mortgagor or owner, it shall, to the extent of payment of loss to the mortgagee, be subrogated to all the mortgagee's rights of recovery, but without impairing mortgagee's right to sue; or it may pay off the mortgage debt and require an assignment thereof and of the mortgage. Other provisions relating to the interests and obligations of such mortgagee may be added hereto by agreement in writing.

One very common right is the right of a mortgagee who is insured under a separate policy to collect his debt from the mortgagor. Suppose a property worth $10,000 serves as security for a debt of $8,000 and that a loss of $4,000 takes place. Naturally, since the security of the mortgagee has been decreased by nearly one half, he expects to be, and is, reimbursed by the insurance company. But the mortgagee still has the right to collect his debt from the debtor, and to permit him to retain this right would be to permit him to collect the same debt twice. Therefore, by the principle of subrogation, the right to $4,000 is transferred to the insurance company that has paid the loss. A similar situation arises when the mortgagor and mortgagee are protected by a policy issued to the mortgagor with the endorsement of a mortgage clause, and the policy

becomes void as to the mortgagor, but is in full force as to the mortgagee. The company makes payment to the mortgagee to the amount of the damage and receives an assignment of his rights to that extent, or pays the full amount of the debt and receives an assignment of the entire debt and mortgage. The policy provides that rights of the mortgagee are not to be prejudiced by this method of settlement.

Summary

I. Use of standard policy forms for fire insurance
II. Development of the standard forms
III. New York Standard Fire Policy, 1943
  A. Parties to the contract
    1. The insurer, or insurance carrier
    2. The insured
      a. Policy is a personal contract.
      b. Nature of interest should be described.
      c. Legal representatives are covered.
      d. An "interest" form of policy
  B. The consideration
    1. By the company, a qualified promise of indemnity
    2. By the insured, responsibility for the premium and adherence to stipulations
    3. Credit for the premium may be extended.
  C. Description of the property
    1. Attachment of a "form"
    2. Location of the property
      a. Property covered only while located as described
      b. Property covered also for five days at new location if removed for preservation from perils covered
  D. Extent of protection afforded
    1. Events covered by the policy
      a. Direct loss by fire
      b. Loss by lightning
      c. Other perils
      d. Loss or damage due to removal for preservation
    2. Excluded events
      a. Invasion, order of civil authority, and the like
      b. Theft
      c. Failure of insured to preserve property
      d. Explosion or riot
    3. Excepted articles
      a. Property not intended to be insured
      b. Property covered only by endorsement
    4. Amount covered by policy
      a. Actual cash value at time of loss
        (1) Depreciation considered
        (2) Profit not included
        (3) Market value and not subjective value considered
      b. Cannot exceed cost of repair or replacement
      c. No allowance for increased cost by reason of ordinance
      d. "Consequential" losses not covered
      e. Cannot exceed interest of insured
      f. Pro rata liability if more than one company covers the risk
  E. Inception
    1. The contract is made when the parties reach an agreement.
      a. A "binder" is frequently used for temporary protection.

2. The contract may be renewed by a renewal receipt or a new policy.
F. The contract may terminate by
1. Occurrence of the event.
2. Expiration of the term.
3. Cancellation
a. By the insured without notice, on a short rate basis.
b. By the company, on five days' notice, on a pro rata basis.
c. Mortgagees are given extra notice.
d. Company agents must be careful to fulfill the requirements.
4. Voidance.
G. Suspension is caused by
1. Vacancy or unoccupancy.
2. Increase of hazard within control or knowledge of the insured.
H. Voidance of the policy is caused by concealment, misrepresentation, or fraud.

IV. Representations and warranties
A. A representation is a statement connected with the making of the contract.
B. The policy is voided by a misrepresentation, a representation which is false and material.
C. A warranty is a condition in the contract.
D. The policy is voided by breach of warranty, and it is necessary only that the warranty be false.
1. But the effect of warranties has been modified by
a. Court interpretations of
(1) What a warranty is.
(2) What constitutes compliance therewith.
b. Statutes.

V. The waiver clause
A. Policy provision states that only certain parts can be waived.
B. Waivers must be in writing.
C. The effect of such clause is modified by usage, acquiescence, apparent authority, knowledge of the company, and estoppel.

VI. Subrogation
A. The right of company, after paying loss, to acquire rights possessed by insured against third parties
B. A right given the company in the contract

VII. Notes on the other standard policy forms (following this Summary).

Notes on Other Standard Policies

Importance of other standard policies. The New York 1943 policy, although adopted in many states, is not in universal use. The Massachusetts policy, the oldest standard form, remains in use in several New England states, and will probably continue to be used for some time. In a few states the older New York policies are still used. California, Iowa, and Texas in the United States and Ontario, Canada, have their own policy forms, the only ones legal in those states. Inasmuch as these policies differ in important respects from the New York 1943 policy used in this text, some notes are added here on the differences of these policies. In states where these forms are in use persons concerned should familiarize themselves with them. The arrangement of these notes conforms to the arrangement of material in the chapter.

Parties to the contract. In the New York 1886 and 1918 policies, if the insured is specified merely by name, without any qualifying description of the nature of his interest in the property, he must be sole and unconditional owner or the policy is void. The same is true in the California policy. Any legitimate interest in the property may be covered, however, by an appropriate description of the interest involved. The interest of a creditor, bailee, or vendor under

a contract, for example, may be protected by attachment of a mortgage clause, commission clause, or installment sales form.

The Massachusetts policy contains no such requirement, and thus automatically covers any form of insurable interest, like the New York 1943 form, but a subsequent sale of the property or increase in hazard without consent of the company voids the policy. The Texas policy also does not require sole and unconditional ownership.

The premium and consideration. The New York 1943 and Texas policies recite that they insure "in consideration of the provisions and stipulations herein or added hereto and of —— dollars premium." The California, Iowa, New York 1918 and New York 1886 policies omit the words "or added hereto." The Massachusetts form names only the premium as the consideration, and adds "the receipt whereof is hereby acknowledged," thus creating the presumption that the premium has been paid. The Ontario form reads "Whereas . . . the insured . . . having undertaken to pay to the ——— Fire Insurance Company . . . the amount of premium above stated, the Company in consideration of the material representations, covenants and warranties of the insured, and of the said premium . . . hereby insures . . ." By such words the important statements and promises of the insured are expressly made part of the consideration for the contract.

Description of the property. The New York 1943, New York 1918, and California policies state that the property is insured "while located and contained as described herein and not elsewhere." The Texas policy reads "only on the property described and located as provided hereon." The Massachusetts and Iowa forms, however, state that the policy shall be *void* if the property shall be removed from the location specified in the policy, unless such removal is necessary for preservation from damage by fire. These policies would therefore terminate upon the removal, and would not revive even if the property were subsequently returned to the original location. The printed portion of the Ontario form makes no mention of the location except to say that the insurance is "in respect of the property hereinafter described," and to provide coverage in the event of necessary removal for protection from fire.

Extent of protection: Events covered. 1. *Direct Loss.* The New York 1943 policy covers "all direct loss by fire, lightning and by removal," whereas both old New York forms and the Iowa policy say "direct loss or damage," and specifically exclude lightning. The Texas policy covers "perils listed below," and the fire coverage includes lightning. The Massachusetts and California forms do not contain the word "direct," and the Ontario form does not contain the word "all." These latter omissions probably have no practical significance.

2. *Excluded events.* The Ontario policy does not specifically mention theft, riot, or neglect to preserve the property. It specifically covers the explosion of coal or natural gas, whether fire ensue therefrom or not. The company is liable for lightning losses, except damage to electrical apparatus.

The New York 1943, Texas, Massachusetts, and Ontario policies do not contain the so-called "fallen building clause." The New York 1918 and California policies, however, provide that the insurance on building and contents ceases when "a building, or any material part thereof, falls except as a result of fire." This provision has, in the main, been upheld by the courts, with the result that the insured is not reimbursed when an earthquake precedes the fire, or when a neighboring explosion blows down a part of the insured buildings. In the 1907 San Francisco fire many buildings were destroyed by earthquake before the fire reached them. Prior to 1918 the New York policy ceased when "any part" of the building had fallen, as in the present Iowa form, but the 1918 New York revision was modified to read "any material part." For the contract not to cover, then, a substantial part of the building must fall before any fire occurs, but whether or not the fall of the building increases the risk is immaterial.

The table on page 376 lists the perils excluded from coverage by the various policy forms.

As justifying and requiring the removal and preservation of property, the New

Perils	*Excluded from Coverage in the Following Policies*						
Enemy attack	NY '43	Mass.	Tex.	.....	.....	....	.....
Civil war	NY '43	Mass.	Tex.	NY '18	NY '86	Cal.	Iowa
Theft	NY '43	Mass.	Tex.	NY '18	NY '86	Cal.	Iowa
Insurrection	NY '43	Mass.	Tex	NY '18	NY '86	Cal.	Iowa
Usurped power	NY '43	Mass.	Tex.	NY '18	NY '86	Cal.***	Iowa
Invasion	NY '43	Mass.	Tex.	NY '18	NY '86	Cal.	Iowa
Neglect to save	NY '43	Mass.	Tex.	NY '18	NY '86	Cal.	Iowa
Resistance to attack	NY '43	Mass.	Tex.	.....	.....	....	.....
Rebellion	NY '43	Mass.	Tex.	.....	.....	....	.....
Revolution	NY '43	Mass.	Tex.	.....	.....	....	.....
Riot	NY '43¶	.....	Tex.¶	NY '18	NY '86	Cal.	Iowa
Civil commotion	.....	.....	.....	NY '18	NY '86	Cal.	.....
Electrical injury	.....	.....	Tex.	.....	.....	....	.....
Military power	.....	.....	.....	NY '18	NY '86	Cal.***	Iowa
Explosion	NY '43¶	Mass.¶	Tex.¶	NY '18¶	NY '86¶	Cal.¶	Iowa¶
Lightning	.....	.....	.....	NY '18	NY '86	Cal.	Iowa
Civil authority	NY '43*	Mass.*	Tex.*	NY '18**	NY '86**	Cal.***	....†

* Acts of civil authority excluded "except acts of destruction at the time of and for the purpose of preventing the spread of fire, provided that such fire did not originate from any of the perils excluded by this policy."

** Acts of civil authority excluded without qualification.

*** "The company will not be liable for loss by . . . order of any civil authority, but the company will be liable (unless otherwise provided by endorsement hereon or added hereto) if the property is lost or damaged, by fire or otherwise, by civil authority or military or usurped power exercised to prevent the spread of fire not originating from a cause excepted hereunder and which fire probably would have caused the loss of or damage to the insured property." Such lengthy verbiage contributes to the failure of the insured to understand the policy.

† Not mentioned.

¶ Unless fire ensue and in that event for loss by fire only.

York 1943 and Texas policies name "the perils insured against," but the New York 1918, New York 1886, Iowa, California, and Massachusetts forms mention fire only. All the policies except Massachusetts provide for pro rata distribution of insurance when removal to more than one location is involved. The language of the older policy forms is ambiguous because they state that they cover the property only in the original location and later promise protection in other locations after removal. All forms provide five days' protection except the Ontario policy, which furnishes protection for seven days "or the unexpired term."

3. *Excluded articles.* Policies vary considerably in this respect, and the status can best be seen from the table on page 377.

Other articles, not mentioned in this group in the policy, and not elsewhere prohibited, are considered to be covered if they come within the *general terms* of the property description, but the articles in the table above are not included under such general terms. They are mostly articles of no intrinsic value (e.g., papers), or whose loss might be easily pretended or readily concealed (e.g., jewels), or whose commercial value would be difficult to establish (e.g., paintings), or articles easily ruined by slight fires (e.g., decorations), or articles insured by other policies (e.g., motor vehicles), or articles that may be of much or little value depending upon circumstances. The value of a mechanical drawing, for example, may be highly doubtful, there being no practical method of determining its market value, whereas a pattern is valuable only if the article produced from it is salable. These exclusions enable the insurance company to make specific arrangements for the insurance of such articles. They are sometimes insured under a "valued" policy, in which the value is agreed upon at the time of issuing the policy, or by making a limited per cent of the insurance applicable to them.

Amounts covered. 1. *Cash value.* All the policies specify "actual cash value at the time of the loss" except Massachusetts, which omits the word "cash." The New York 1918 and Texas policies add the words "ascertained with proper deduction for depreciation." The California form employs the useful and exact expression, "actual cash value of the *interest of the insured.*" The Ontario form is well stated as "the amount of such loss or damage to be

Articles	*Excluded from Coverage in the Following Policies**						
Accounts	NY '43*	Mass.	Tex.*	NY '18*	NY '86*	Cal.*	Iowa*
Bills	NY '43*	.....	.....	NY '18*	NY '86*	Cal.*	Iowa*
Deeds	NY '43*	.....	Tex.*	NY '18*	NY '86*	....	Iowa*
Evidences of debt	NY '43*	.....	Tex.*	NY '18*	NY '86*	Cal.*	Iowa*
Securities	NY '43*	.....	Tex.*	NY '18*	NY '86*	Cal.*	Iowa*
Bills of exchange	.....	Mass.	.....	.....	.....	.....	.....
Notes	.....	Mass.	.....	NY '18*	NY '86*	Cal.*	Iowa*
Evidences of property	.....	Mass.	.....	.....	.....	.....	.....
Records	.....	.....	Tex.	.....	.....	.....	.....
Evidences of ownership	.....	.....	.....	.....	.....	Cal.*	.....
Other documents	.....	.....	.....	.....	.....	Cal.*	.....
Currency	NY '43*	.....	Tex.*	NY '18*	NY '86*	Cal.*	Iowa*
Money	NY '43*	Mass.	Tex.*	NY '18*	NY '86*	Cal.*	Iowa*
Bullion	NY '43	.....	Tex.	NY '18	NY '86	Cal.	Iowa
Plate	.....	Mass.	.....	.....	.....	.....	.....
Jewels	.....	Mass.	.....	.....	NY '86	Cal.	Iowa
Medals	.....	Mass.	.....	.....	NY '86	Cal.	Iowa
Dies	.....	.....	.....	NY '18	NY '86	Cal.	Iowa
Mechanical drawings	.....	.....	.....	NY '18	NY '86	Cal.	Iowa
Patterns	.....	Mass.	.....	NY '18	NY '86	Cal.	Iowa
Models	.....	Mass.	.....	.....	NY '86	Cal.	Iowa
Awnings	.....	.....	Tex.	.....	NY '86	.....	Iowa
Store and office furniture and fixtures	.....	.....	.....	.....	NY '86	Cal.	Iowa
Frescoes	.....	.....	.....	.....	.....	Cal.	Iowa
Decorations	.....	.....	.....	.....	.....	Cal.	Iowa
Plate glass	.....	.....	.....	.....	.....	.....	Iowa
Signs	.....	.....	.....	.....	NY '86	.....	Iowa
Paintings	.....	Mass.	.....	.....	.....	.....	.....
Sculpture	.....	Mass.	.....	.....	NY '86	Cal.	Iowa
Pictures	.....	.....	.....	.....	NY '86	Cal.	Iowa
Casts	.....	.....	.....	.....	NY '86	Cal.	Iowa
Curiosities	.....	Mass.	.....	.....	NY '86	Cal.	Iowa
Animals	.....	.....	Tex.	.....	.....	.....	.....
Motor vehicles	.....	.....	Tex.	.....	.....	.....	.....
Aircraft	.....	.....	Tex.	.....	.....	.....	.....
Manuscripts	NY '43	.....	.....	NY '18	NY '86	Cal.	Iowa
Books	.....	Mass.	.....	.....	.....	.....	.....
Wearing apparel	.....	Mass.	.....	.....	.....	.....	.....
Scientific collections	.....	Mass.	.....	.....	.....	.....	.....
Scientific apparatus	.....	.....	.....	.....	NY '86	Cal.	Iowa
Implements	.....	.....	.....	.....	NY '86	.....	Iowa
Property in storage or for repair	.....	.....	.....	.....	NY '86	Cal.	Iowa

* Insurance of these articles is prohibited. All the other articles are not covered unless liability is specifically assumed on the policy. In the Massachusetts policy no articles are actually prohibited.

estimated according to the actual cash value of the property at the time of the loss or damage . . . to an amount not exceeding the sums set opposite the several items below and not exceeding in the whole the sum above stated as the sum insured."

2. *Repairs and replacements.* In the New York 1943 policy and all other policies, the company's liability is limited by the cost of repairing or replacing the property. All the policies except that of Iowa in addition make it optional for the company to take all, or any part, of the property at the agreed or appraised value, and to repair, rebuild, or replace the property lost or damaged. In the Massachusetts policy, the company may "replace the property with other of the same kind and goodness," or "it may . . . rebuild or repair the

same with reasonable expedition." The Iowa policy does not allow the company these options.

3. *Cost increased by law.* The New York 1943, Texas, California, New York 1918, New York 1886, and Iowa policies provide that the loss shall be calculated "without allowance for any increased cost of repair or reconstruction by reason of any ordinance or law regulating construction or repair. No such provision appears in the Massachusetts and Ontario policies.

4. *Consequential losses.* The Massachusetts and Ontario forms do not expressly exclude such losses from coverage, but the common law principle that they are not covered by a simple fire insurance policy is generally accepted. Besides, the New York 1943, New York 1886, New York 1918, Iowa, and Ontario forms specify *direct* loss by fire. The California, New York 1918, New York 1943, and Texas policies specifically exclude from the fire insurance protection "loss resulting from interruption of business or manufacture," and the New York 1886 policy expressed the same intent in slightly different words.

5. *Pro rata liability.* The New York 1943 policy limits the liability of an individual company, in case of other insurance, to the proportion of any loss that "the amount hereby insured shall bear to the whole insurance covering the property against the peril insured, whether collectible or not." The New York 1918 policy in addition contains the words "whether valid or not" and the New York 1886 and California policies are substantially the same, having the words "by solvent or insolvent insurers" instead of "whether collectible or not." The words "whether valid or not" mean that if the insured has policies in two or more companies, one of which policies is found to be void at the time of the loss, the insured will lose the amount represented by the void policy. "Collectible" is a broader term than valid, covering both invalid policies and valid policies that insurers are unable to pay.

The Ontario form provides vaguely that the insurance company is liable for a "rateable proportion of the loss," but adds that if there is other prior insurance without the knowledge of the subsequent insurer, or other subsequent insurance without the consent of the prior insurer, the insured cannot recover more than 60 per cent of the loss, and each insurer is liable for "a rateable proportion of such amounts."

The Massachusetts policy states that the insured "shall recover on this policy no greater proportion of the loss sustained than the sum hereby insured bears to the whole amount insured . . ." No definition is given of "the whole amount insured." The Texas policy is the same as the New York 1943 policy except for the addition of a phrase covering adjustment of losses under nonconcurrent policies, which is discussed in the chapter on *Settlement of Losses.* In the Iowa policy the proportion of liability is the ratio of the amount insured to "the whole amount of valid and collectible insurance covering such property," an important exception to the general rule.

What all these expressions really intend is "the whole insurance covering the particular *interest* insured by this policy," for there may be several insurable interests insured by different persons on the same property.

Inception of the policy. No notes are necessary on this subject.

Termination of the contract. *By the insured.* All the forms give the insured the privilege of terminating the policy by cancellation, and all provide for charging the insured the short rate in such case and refunding the balance. The Massachusetts and Texas policies express the same meaning as the New York 1943 policy in slightly different terminology. The New York 1886 and Iowa policies are less clearly worded, but have the same meaning. The Ontario form provides that "The insurance may be terminated . . . if on the cash plan, by the insured giving written notice of termination to the insurer, in which case the insurer shall, upon surrender of this policy, refund the excess of premium actually paid by the insured beyond the customary short rate for the expired time." It will be noted that the notice must be *in writing,* which is not required by any of the other forms. The Ontario form also provides that "Repayment of the excess premium may be made by money, post office order

or postal note or by cheque payable at par and certified by a chartered bank doing business in the Province."

By the company. All policies make some provision for cancellation by the company. The New York 1918 and New York 1943 policies are identical. The Massachusetts form provides that "The company also reserves the right, after giving written notice to the insured and to any mortgagee to whom this policy is made payable, and tendering to the insured a rateable proportion of the premium, to cancel this policy as to all risks subsequent to the expiration of *ten* days from such notice, and no mortgagee shall then have the right to recover as to such risks." The Texas policy provides for a notice of five days to the owner and ten days to the mortgagee. The California form is virtually the same as the New York 1943 policy, but with respect to the mortgagee provides for "five days' written notice to any mortgagee or other party to whom, with the written consent of the company, this policy is made payable."

The Ontario form provides for "fifteen days' notice of cancellation by registered mail, or five days' notice of cancellation personally delivered," and "refunding the excess of premium actually paid by the insured beyond the pro rata premium for the expired time." For the manner of payment see page 378. It also provides that when the company is notified of an increase of hazard it "may return the unearned portion, if any, of the premium paid and cancel the policy, or may notify the insured in writing that, if he desires the policy to continue in force, he must within fifteen days of the receipt of the notice pay to the insurer an additional premium, and in default of such payment the policy shall not longer be in force and the insurer shall return the unearned portion, if any, of the premium paid." With respect to the mortgagee the Ontario policy provides that "where the loss, if any, under a policy has, with the consent of the insurer, been made payable to some person other than the insured, the policy shall not be canceled or altered by the insurer to the prejudice of such person without reasonable notice to him."

The New York 1886 and Iowa policies read "This policy shall be canceled . . . by the company by giving five days' notice of such cancellation . . . If this policy shall be canceled, or become void or cease . . . the unearned portion shall be returned on surrender of this policy or last renewal . . . except that when this policy is canceled by this company by giving notice it shall retain only the pro rata premium." This provision has led to difficulty because a number of court decisions have interpreted it as meaning that the return premium has to be actually in the hands of the insured to complete the cancellation. Also there is no requirement that the company shall inform the insured of his right to the return premium. Difficulty may also arise because of inability of the insured to produce the insurance policy for surrender. The New York 1886 and Iowa policies further provide, "If, with the consent of this company, an interest under this policy shall exist in favor of a mortgagee or of any person or corporation having an interest in the subject of insurance other than the interest of the insured as described herein, the conditions hereinbefore contained shall apply in the manner expressed in such provisions and conditions of insurance relating to such interest as shall be written upon, attached or appended hereto." It is customary for an attached mortgagee clause to provide the mortgagee with ten days' notice of cancellation.

Suspension. Unlike the New York 1943 policy, and the Texas policy, other policies contain numerous provisions that suspend the policy, provisions relating to other insurance, alterations and repairs, prohibited articles and processes, factory operations at night, chattel mortgages, removal from location specified, and so forth. These are now to be enumerated. Only three were retained in the New York 1943 policy, namely; (1) increase of hazard, (2) vacancy or unoccupancy, and (3) explosion and riots not followed by fire. The Texas policy adds two others: (4) following a change in ownership and (5) violation of other stipulation or condition of the policy.

Other Insurance. The New York 1943 policy merely states that other insurance *may* be prohibited or the amount of insurance may be limited by endorse-

ment on the policy, and the Texas policy contains no prohibition of other insurance.

The New York 1918 policy provides that "the Company shall not be liable for loss or damage occurring while the insured shall have any other contract of insurance whether valid or not on property covered in whole or in part by this policy." Consent for other insurance, either at the issuance of the policy or later, may be obtained from the company and endorsed on the policy without any extra charge unless there is a specific object in restricting the amount of insurance. It is sometimes the object not to insure the full value of the property in order (a) to compel the insured to exercise greater care or (b) to decrease any moral hazard that may exist.

In the Massachusetts form the policy is void *if* (instead of *while*) the insured has "other insurance" without consent, but the form does not specify whether the provision refers to invalid other policies. The word "insurance" seems to imply that invalid policies are not included. Nor does the Massachusetts form contain the words "in whole or in part," with the result that the divisibility of the policy is left in doubt.

The New York 1886 and Iowa policies also use the word "if," but add "whether valid or not." Does this apply to a valid policy in an insolvent company? The Iowa policy, however, in another place states, "It is hereby agreed that the insured may obtain $..... additional insurance in companies authorized to do business in the state of Iowa." The California policy uses the word "if," refers to the "entire" policy, and specifies "whether valid or not, on property covered in whole or in part by this policy."

The companies always insisted that when a policy was stated to be void *if* other insurance (and some other conditions) existed, it was made permanently void and not revived by the removal of the prohibited condition, but the courts were much more liberal and usually gave the word *if* only the force of *while*. The New York 1943 and Texas policies are even more liberal.

The Ontario form, in meaning though not in wording, is substantially like the Massachusetts form, but it penalizes the insured for unauthorized other insurance by providing that he shall recover only 60 per cent of the loss. For undisclosed other insurance with fraudulent intent, the policy is void.

Except for reinstatement of the policy when the condition was removed, the courts have upheld this clause, for it would otherwise be easy for a person to overinsure his property. In regard to the New York 1886 provision three lines of court decisions exist. One holds that when two policies exist without consent, the later policy is void from its inception because of the prohibition, and since the second policy never really existed, the first policy is valid. Another view is that the subsequent policy invalidated the first policy and might or might not itself be valid. The third view gave the insured the benefit of one policy, but not of both; i.e., if the company recognized the subsequent policy, the first was invalid, and if the second company repudiated the second policy, the first was valid.

It will be noticed that this prohibition in the New York 1918 and California policies refers to a property "covered in whole or in part by this policy," an expression that brings up the doctrine of "entirety of the contract." This doctrine is important not only in connection with the subject of "other insurance" but with other subjects as well. It would seem that the intention of the company is that when the policy is violated as regards a part of the property, the insurance on all the property is suspended or void. In other words, the policy is regarded as a unit and indivisible. The court decisions have shown a tendency, however, to be lenient toward the insured, and the policy has been considered sometimes as divisible and sometimes indivisible. One decision held that when the company acknowledged liability upon one building covered by a policy it acknowledged liability upon all of them, although the vacancy prohibition had been violated as to part of the property. In another case, in which the policy covered 16 tenement houses, the court held the policy to be valid in the case of one building which was burned, although at the time eight

of the houses were vacant contrary to the policy provision. The tendency has been to give consideration to the character of the subject matter insured. The policy should undoubtedly be strictly construed when it covers a building and its contents, whereas a policy covering several buildings some distance apart might be considered divisible.

Alterations and repairs. The New York 1918 policy provides that the company shall not be liable for loss or damage occurring "while mechanics are employed in building, altering, or repairing the described premises beyond a period of fifteen days." It is plain that the object of this clause is to cover a building while such alterations and repairs are being made as are necessary for the upkeep of the property, but not to cover a building while it is being extensively remodeled. The latter object constitutes a risk not contemplated when the policy was issued.

The California policy is the same as above. The Massachusetts form contains no provision covering repairs; therefore, reasonable repairs may be made in the ordinary manner without suspension of the policy. The New York 1886 and Iowa policies are voided permanently by repairs exceeding 15 days (by use of the word *if*), unless the court leniently construes otherwise. In the Iowa policy, however, there is a stipulation applying to this and the following conditions of voidance which nullifies the voidance "if the insured shall establish that the failure to observe and comply with such provisions and conditions did not contribute to the loss." This statement will not be repeated in subsequent notes but merely indicated by the words "if contributing to the loss."

In the Ontario form the insurer is not liable "during alteration or repair" without consent for "loss or damage occurring in consequence thereof," but 15 days are allowed in each year without permission.

The prohibition against repairs and alterations is completely eliminated from the New York 1943 and Texas policies.

Prohibited articles and processes. In all policy forms except the New York 1943 and Texas, certain dangerous processes and articles are prohibited.

In the New York 1918 policy the company is not liable "while illuminating gas or vapor is generated on the described premises; or while (any usage or custom to the contrary notwithstanding) there is kept, used or allowed on the described premises fireworks, Greek fire, phosphorus, explosives, benzine, gasoline, naphtha, or any other petroleum product of greater inflammability than kerosene oil, gunpowder exceeding twenty-five pounds, or kerosene oil exceeding five barrels." The list in the New York 1886 and (if contributing to the loss) Iowa policies includes in addition benzol, dynamite, ether, nitroglycerine; and the word *if* is employed. In regard to kerosene oil, the New York 1886 policy requires that it be drawn and that lamps be filled by daylight, or at a distance not less than ten feet from artificial light. Benzol, dynamite, naphtha, and nitroglycerine are included within the meaning if not the words of the 1918 policy, and ether and kerosene oil have become relatively little used in the ordinary dwelling or business house. The provision regarding the filling of lamps was never enforceable. It should be noted that nearly every court has held that when the use of any prohibited article is usual and necessary in the conduct of the business of the insured or is kept in similar establishments, such use or keeping does not void the policy, although there are some decisions to the contrary. In some cases the provision, "any custom of trade or manufacture to the contrary notwithstanding," has been held to be in restraint of trade and contrary to public policy.

The New York 1943 and Texas policies eliminate mention of these prohibited articles entirely.

It would take too much space and serve little purpose to enumerate the individual articles and processes that are prohibited or permitted under other individual forms. The Massachusetts and Iowa and New York 1886 forms are permanently void by use of the word *if*, but the other forms are merely suspended by the word *while*. On the other hand the Massachusetts list is the smallest, whereas the New York 1886 list is the most comprehensive. Persons

concerned should examine the policies used in their states and obtain endorsements when necessary.

Factories operated at night. In regard to manufacturing establishments, in the New York 1918 contract a factory is not covered "while operated in whole or in part between the hours of 10.00 P.M. and 5.00 A.M. or while it ceases to be operated beyond a period of ten days." In many instances overtime operation increases the hazard. The ten-day limitation is intended to cover two cases—one in which a strike occurs, with consequent additional danger to the premises; the other in which business is poor and the property consequently becomes worthless in the owner's estimation, the moral hazard thus increasing.

The New York 1886, Massachusetts, and Iowa forms are permanently voided by overtime operations after 9 P.M., 10 P.M., and 9 P.M., respectively. The New York 1943, Texas, and Ontario forms do not prohibit overtime operation. The California form suspends the policy while a factory is operated after 10 P.M. As to cessation of operations, the New York 1886 and Iowa policies are voided by more than ten days, the Massachusetts and Ontario forms by more than 30 days. The California policy is merely suspended by cessation for more than ten days. New York 1943 and Texas policies contain no prohibition against cessation of operations.

Vacancy. The New York 1918 form suspends the insurance protection while vacancy or unoccupancy exceeds ten days. The New York 1886, Iowa, and Massachusetts forms are permanently voided by vacancy, and the New York 1886 and Iowa policies also by unoccupancy, if the time exceeds ten days under the New York form, ten days under the Iowa form, and 30 days under the Massachusetts form. The California and Ontario policies suspend the policy while the vacancy or unoccupancy exists, if it exceeds ten days or 30 days, respectively. The New York 1943 and Texas policies omit this restriction.

Chattel mortgages. Under the New York 1918 form, a company is not liable for property "while incumbered by a chattel mortgage, and during the time of such incumbrance this company shall be liable only for loss or damage to any other property insured hereunder." The chattel mortgage is regarded as objectionable because it frequently indicates the poor financial condition of the insured, and the property also usually depreciates in value before payment for it is completed. A custom of business requiring chattel mortgages may induce a company to waive its objections, but liens on personal property are in general avoided. It will be noted that the contract is herein specifically stated to be divisible and not "entire."

The California policy suspends the policy as to the property mortgaged while the chattel mortgage exists, but "the liability of the company upon other property hereby insured shall not be affected by such chattel mortgage." The Iowa policy is voided "if the subject of insurance or a part thereof (as to the part so incumbered) be or become incumbered by lien, mortgage or otherwise, created by voluntary act of the insured or within his control." The New York 1886 form is permanently voided as to the "entire policy" by a chattel mortgage. The Massachusetts, Ontario, and New York 1943 policies contain no such provision.

Increase of hazard. Like the New York 1943 policy, the New York 1918 and California forms merely suspend the policy while the increased hazard exists. In the Massachusetts, New York 1886, Ontario, and (if contributing to the loss) Iowa forms, however, the policy is permanently void. Nevertheless these latter have frequently been interpreted with liberality toward the insured. The New York 1943 and New York 1918 wordings are identical. The New York 1886 and Iowa policies are more stringent, being void if the hazard is increased by means within the *knowledge* of the insured. This provision means permanent voidance and does not require that the means be within the *control* of the insured. The same is true of the Massachusetts policy, although different language is used. The Texas policy, on the other hand, after using the same words as the New York 1943 policy, makes the proviso that such increase be "not usual and incidental to the occupancy . . ."

In the California form the risk must be "materially" increased (a provision

that is not particularly noteworthy in the light of court decisions) and also must be within the "control" and not merely the knowledge of the insured. In the Ontario form the increase must be "material to the risk," "within the control *and* knowledge of the insured," and such increase voids the policy only "as to the part (of the risk) affected thereby," a divisibility that would seem to invite controversy thus being introduced.

Voidance. It has been noted in this chapter that the New York 1943 policy contains only two provisions for voiding the policy, pertaining to (1) willful concealment or misrepresentation, and (2) fraud or false swearing. The same provisions obtain in the Texas policy. Other policies, legally established earlier and still used in some states, are less liberal, containing sometimes the following five reasons for voidance.

Concealment, misrepresentation, fraud. The New York 1918, Iowa, and California policies provide that "This entire policy shall be void if the insured has concealed or misrepresented any material fact or circumstance concerning this insurance or the subject thereof." The Massachusetts form states that "This policy shall be void if any material fact or circumstance *stated in writing* has not been fairly represented by the insured." The Texas policy is the same as the New York 1943 policy and applies also to the "interest of the insured," and "whether before or after a loss." The Ontario form provides that "If any person applying for insurance falsely describes the property to the prejudice of the insurer, or misrepresents or fraudulently omits to communicate any circumstance which is material to be made known to the insurer in order to enable it to judge of the risk to be undertaken, the contract shall be void as to the property in respect of which the misrepresentation or omission is made."

The provision in the New York 1918 policy states that "This entire policy shall be void . . . in case of any fraud or false swearing by the insured touching any matter relating to this insurance or the subject thereof, whether before or after a loss." The California and New York 1886 forms are substantially the same. The Massachusetts policy is void "if the insured shall make any attempt to defraud the company either before or after the loss." The Texas policy is the same as the New York 1943 policy, and the words "before or after a loss" do not apply to this section.

The following do not appear as conditions voiding the New York 1943 policy, thus further exemplifying the liberality of that form.

Sole and unconditional ownership. The New York 1918 policy is void "if the interest of the insured be other than unconditional and sole ownership," unless otherwise provided. According to this provision an insurable interest other than sole and unconditional ownership is not sufficient for a valid contract, without a statement of its nature in the policy. For illustration, a stockholder in a corporation is part owner of the assets of the corporation, but he is not a sole and unconditional owner. Again, a person may be entitled to the royalties from the use of certain property, but he is not the sole and unconditional owner. A partner has an insurable interest in the property of the firm, but does not comply with the requirement of being sole and unconditional owner. Joint ownership or tenancy for life are other obvious illustrations. It has been held by the courts, however, that mortgaging the property does not deprive the insured of sole and unconditional ownership.

This provision has caused considerable trouble. On the one hand it has been contended that insurance companies are entitled to know the nature of the interest they are insuring and have seldom refused to cover legitimate insurable interests. On the other hand insureds are seldom aware of the requirement of sole and unconditional ownership and thus are led into innocent violations of it. In a study of 581 policies issued in two cities in Illinois it was found that 28 per cent of all fire insurance policies on real estate, and 55 per cent of all fire policies on jointly owned real property, were void or unenforceable under the law of Illinois.[1] It is argued that loss ratios in states using policies without

[1] Goble, Geo. W., "Proposed Revision of the Standard Fire Insurance Policy." *Journal of the American Bar Association,* March 1941, pp. 164-166.

this provision are not higher than in states where the provision is employed.

The California, Iowa, and New York 1886 forms are identical with the New York 1918 policy. The Ontario policy reads, "Unless otherwise specifically stated in the policy, the insurer is not liable . . . for loss or damage to property owned by any person other than the insured, unless the interest of the insured therein is stated in the policy." The Massachusetts and Texas policies do not contain this sole and unconditional ownership requirement and are therefore like the New York 1943 policy, being available to anyone having an insurable interest, without special description of the nature of the insurable interest.

Ground ownership in fee simple. The New York 1918 contract states that unless otherwise provided the policy is void, "if the subject of insurance be a building on ground not owned by the insured in fee simple." This is a title free from condition or limitation, the largest estate of ownership known to the law. For example, buildings standing on ground not owned by the insured may have their value suddenly diminished by some action taken with reference to the ground, or the owner of the buildings may have the value thereof virtually taken away from him by an order to remove them. If the insured buildings stand on leased ground and become the property of the land owner at the expiration of the lease, there is an incentive for the owner of the buildings to burn them as the expiration date approaches. Life tenancy is not ownership in fee simple.

The same provision as above quoted appears in the New York 1886, and California forms. Iowa omits the words, "in fee simple." This condition is not contained in the New York 1943, Massachusetts, Texas, or Ontario policies.

Foreclosure proceedings. Unless otherwise provided the New York 1918 policy is void "if, with the knowledge of the insured, foreclosure proceedings be commenced or notice given of sale of any property insured hereunder by reason of any mortgage or trust deed." The same provision is in the New York 1886 and California forms. The Iowa policy prohibits liens created by the voluntary act of the insured. The Massachusetts, New York 1943, Texas, and Ontario policies omit this condition.

The knowledge of the insured that foreclosure proceedings have begun is likely to make him less careful in using the property and to create moral hazard. Foreclosure proceedings frequently lead to quarrels between the parties involved, or the sale of a portion of the property may render the remainder less valuable. The courts have been inclined to leniency toward the insured and have held, for example, that entry of judgment on a bond without a sale, proceedings to enforce a mechanic's lien, and foreclosure proceedings instituted before the issuance of the policy do not come within the scope of the provision.

Change in interest, title or possession. The New York 1918 policy is also void "if any change, other than by the death of an insured, takes place in the interest, title or possession of the subject of insurance (except change of occupants without increase of hazard)." The New York 1943 policy omits this provision, but the Texas policy is void "following a change in ownership of the insured property."

The policy is voided (by an *if* clause) in the Ontario form (apparently) and the New York 1886, Iowa, and Massachusetts forms. The wording of the New York 1886 form is the same as in the New York 1918 policy above, with the addition after the word "hazard" of "whether by legal process of judgment or by voluntary act of the insured, or otherwise." In California, the word "while" is employed to suspend the policy. In the California policy the increase of hazard must be "material," and a specifically prohibited change is "transfer by one or more of several partners or co-owners to the others."

The Iowa policy is voided if any change "other than by death of the insured, whether by legal proceedings, judgment, voluntary act of the insured or otherwise, take place in the interest, title, possession, or use of the subject of insurance, if such change in the possession or use makes the risk more hazardous"—a very stringent provision were it not for the last saving clause.

The Ontario policy has no provision of exactly this type, but it is void "after the interest of the insured in the subject matter of the insurance is assigned, but this condition is not to apply to an authorized assignment under The Bankruptcy Act or to change of title by succession, by operation of law, or by death."

For the same reasons that the insurance company wishes to know the interest of the insured at the issuance of the contract, this provision attempts to assure that the company will be kept advised of changes that occur. It is not designed, however, to prevent an administrator, executor, or heirs from obtaining the benefit of the insurance bought by the deceased, or to cause unnecessary annoyance to an owner who rents his premises. Examples of violations are the appointment of a trustee in bankruptcy, an assignment for the benefit of creditors, and the introduction of a new partner. On the other hand, courts have not considered as violations the mortgaging of a property, issuance of a bill of lading on goods remaining in the insured's possession, a judgment rendered against the insured, an executory contract to sell real estate when the vendor has retained possession, or the appointment of a receiver in bankruptcy prior to the appointment of the trustee. It may be noted that this provision has no significance if the policy has an endorsement making insurance payable "to whom it may concern."

Assignment of policy without consent. The New York 1918 and California policies provide that "This entire policy shall be void if this policy be assigned before a loss." Iowa simply omits the word "entire" and the Massachusetts policy states that "this policy shall be void if, without such assent (by the company), the said property shall be sold or this policy assigned . . ." The New York 1943 and Texas policies do not make the policy void in the event of such act but merely state that "assignment of this policy shall not be valid except with the written consent of this company." Assignment has also been discussed previously on pp. 345-347 of the previous chapter.

Waiver. The New York 1918 policy states that "No one shall have power to waive any provision or condition of this policy except such as by the terms of this policy may be the subject of agreement added hereto, nor shall any such provision or condition be held to be waived unless such waiver shall be in writing added hereto, nor shall any forfeiture be held to be waived by any requirement, act or proceeding on the part of this company relating to appraisal or to any examination herein provided for; nor shall any privilege or permission affecting the insurance hereunder exist or be claimed by the insured unless granted herein or by rider added hereto." The New York 1886 policy is substantially the same as above. No such provision appears in the Massachusetts policy. The Iowa policy states that "any examination or investigation" in settling a loss does not contitute a waiver. The Ontario form provides, "No condition of this policy shall be deemed to have been waived by the insurer, either in whole or in part, unless the waiver is clearly expressed in writing signed by an agent of the insurer." The California form reads, "No officer, agent, or other representative of this company shall have power to waive any provision or condition of this policy except by writing endorsed hereon or added hereto, and no person, unless duly authorized in writing, shall be deemed the agent of this company."

The New York 1943 policy reads, "No permission affecting this insurance shall exist, or waiver of any provision be valid, unless granted herein or expressed in writing added hereto. No provision, stipulation or forfeiture shall be held to be waived by any requirement or proceeding on the part of this company relating to appraisal or to any examination provided for herein." The Texas policy provides, "Changes in this policy may be made and perils added hereon only by written endorsement properly executed by an authorized agent of this company and attached hereto; but no provision may be waived except such as by the terms of this policy is subject to change."

Subrogation. In the New York 1886 policy the right of the company to subrogation is introduced by the words, "If the company shall claim that the

fire was caused by the act or neglect of any person or corporation, private or municipal, this company shall be subrogated, etc.," and the same provision holds true of the California form. The New York 1943, Texas, New York 1918, and Ontario forms require no such claim as a precedent to subrogation. In the Massachusetts policy the company is entitled to the insured's rights against third parties "excepting other insurers," and the alternative is added, "or the insured, if requested, shall prosecute therefor at the charge and for the account of the company." When the loss payment is less than the damage, it has been held in some cases that the insured is the proper party to bring suit against the third party responsible for the damage. In Michigan a statute provides that subrogation "shall be deemed to include contractual as well as tort rights of action, to the extent only of the loss." This statute adds something to the company's rights because several court decisions have held that the company was not entitled to the insured's rights arising out of other *contracts*, such as a builder's contract to complete a building, a contract to buy which was actually completed by the buyer, and the like. The Iowa policy contains no provision regarding subrogation.

The New York 1943 contract provides that "If this company shall claim that no liability existed as to the mortgagor or owner, it shall, to the extent of payment of loss to the mortgagee, be subrogated to all the mortgagee's rights of recovery, but without impairing the mortgagee's right to sue; or it may pay off the mortgage debt and require an assignment thereof and of the mortgage. Other provisions relating to the interests and obligations of such mortgagee may be added hereto by agreement in writing." The Texas policy provision is the same. The New York 1918 policy is the same, except that it gives the company subrogation also to "the mortgagee's . . . claim upon the collateral to the mortgage debt." No such provision as to mortgagees appears in the New York 1886, Iowa, Ontario, or California policies. The Massachusetts policy reads, "Whenever this company shall be liable to a mortgagee for any sum for loss under this policy, for which no liability exists as to the mortgagor, or owner, and this company shall elect by itself or with others to pay the mortgagee the full amount secured by such mortgage, then the mortgagee shall assign and transfer to the companies interested, upon such payment, the said mortgage, together with the note and debt thereby secured."

Readings

Medlicott, W. B., *Lectures on Fire Insurance.* Boston: Insurance Library Association of Boston, 1912, pp. 273-385.

Williams, T. H., "The Fire Insurance Contract." *Underwriters' Report,* San Francisco, 1913.

Patterson, E. W., *Essentials of Insurance Law.* New York: McGraw-Hill Book Co., 1935, Chaps. VI to XII, incl.

Fleming, Reginald, "Revision of the New York Fire Policy." *Proceedings of American Management Assn.,* May, 1940.

Smith, C. M., "New York Fire Policy Revision." *Proceedings of American Management Assn.,* May, 1940.

Bament, W. N., "Cash and Market Values." *Eastern Underwriter,* December 30, 1921.

Bament, W. N., "Losses of Concussion and Explosion." *Eastern Underwriter,* September 2, 1921.

Deitch, G. A. and Wood, D. G., *The Standard Fire Policy.* Indianapolis: Rough Notes Co., 1930.

Brevis, H. W., *Glens Falls Handy Book.* Glens Falls: Glens Falls Insurance Co., 1927, Chap. III.

Ackerman, L. J., "What Is a Fire?" *University of Newark Law Review,* Vol. II, No. 2, 1937.

Smith, C. M., "Revision of the Standard Fire Insurance Policy." *Journal of American Insurance,* November, 1939.

Insurance Society of New York, *The Fire Insurance Contract.* Indianapolis: Rough Notes Co., 1922.

Thornton, H. A., "The California Standard Form." *Fire Underwriters' Association of the Pacific,* Lectures to Associate Members, 1915.

Wallace, J. H., "New York Standard Fire Insurance Policy Legally Interpreted." *Eastern Underwriter,* February 5 to March 5, 1926.

Rosenberg, J. M., "Increase of Hazard in Fire Insurance." *Journal of American Insurance,* April, 1932.

Reed, P. B., *Fire Insurance Underwriting.* New York: McGraw-Hill Book Co., 1940, Chap. V.

Lucas, Julian, *The Standard Fire Insurance Policy of the State of New York.* New York: Davis Dorland & Co., 1943.

Rupprecht, C. F., *Modern Fire Underwriter,* Philadelphia: Spectator Co., 1940.

Problems

1. Would the advantages of a standard policy apply to life insurance as well as to fire insurance?

2. A policy of fire insurance was issued in which "John Dougherty" was named as the insured and the property consisted of "residence at 140 Plum Street." The agent asked Dougherty if he was the owner, and Dougherty replied, "How do you suppose I could live here otherwise?" Dougherty in fact was given the privilege of occupying the house rent free for life, by the terms of his father's will. Is the policy valid? Why?

3. Watson died, naming Holmes as executor of his will. The property included a factory, owned by Watson personally, on which there was a five-year fire insurance policy having three years yet to run. Holmes did nothing with respect to the policy, the premium having been paid for five years in advance. At the end of one year the factory was sold to Grice, who received the deed and fire insurance policy from Holmes. Three months after the sale, the factory was destroyed by fire. Can Grice recover on the fire policy? Why?

4. How is a fire insurance policy adapted to the different circumstances of the various insureds?

5. Colonel Gore asked French, an agent for the Charity Fire Insurance Company, to insure his house. Two days later French mailed him the policy with a bill for the premium. Receiving no reply French wrote Gore that he would expect the premium to be paid within three days, for he could not extend credit. Two days later Gore's house was burned. Can Gore recover on the policy?

6. In a store and stock insured for $15,000 a fire occurred. $2,000 worth of goods was burned, $1,000 of damage was caused by water in extinguishing the fire, and $3,000 of groceries was unfit for sale because of smoke. During the fire a mob of twenty people carried off $200 of groceries in spite of the efforts of manager and clerks to prevent them. For a month afterward the company was not able to carry on business while repairs were being made, and $4,000 profit was lost. What can the insured recover under his fire policy?

7. The insured built a fire in a stove that had a defective stove pipe, and the soot and smoke escaping from the latter ruined the furniture and hangings in the room. The contents of the room were further damaged by water used to cool the ceiling heated by the pipe. What can the insured recover for?

8. The danger of residing near a manufactory of explosives was pointed out to Edwards, who replied that his fire insurance policy covered the risk. To what extent is this reply correct?

9. Insured's house was burning and his goods were thrown out on the side-

walk. The policy was for $2,000, and the total value of the goods insured was $2,500. Insured was told that his goods were being damaged and stolen by spectators, and he replied, "I have a fire insurance policy; it is not my loss." Later he removed $1,000 of the property to a warehouse nearby. A few days later the warehouse and all his goods that were stored therein were destroyed by fire. What can he recover from the insurance company?

10. In insurance on a publishing concern what items probably should be specifically mentioned in the description of contents?

11. At the time of the great fire in San Francisco some buildings were thrown down by earthquake, some were dynamited by the fire marshal to prevent the spread of fire, and some were blown up by private individuals with the same object. Which of these cases are covered by the fire insurance policy?

12. Pick out from among the following losses those for which the company must pay:

(a) House blown down by tornado and as a result catches fire.
(b) House set on fire by lightning.
(c) Goods damaged by an explosion caused by a fire in the insured property.
(d) House burned down by strikers during a riot.
(e) Cloth damaged by water used in putting out a fire.
(f) Building damaged by a fire engine on its way to a fire elsewhere.

13. Riley's cold storage warehouse and contents were insured under a standard fire policy, without endorsements. Across the street was a refrigerating plant, also owned by Riley, which supplied the cold air for the warehouse through pipes. The refrigerating plant was destroyed by fire, and a stock of meats belonging to Riley, kept in the warehouse, was ruined. Can Riley recover on his insurance policy?

14. Rhodes and his wife had a disagreement, and she, in anger, set fire to his house, which was insured in the Flame Insurance Co. Is the insurance company liable on the policy?

15. Wheat was a manufacturer of straw hats, and insured his manufactured and unmanufactured stock for $2,000. The factory and contents were destroyed by fire, including a quantity of hats that had been sold, finished, cased for shipment, and marked with the buyers' names. The delivery would have commenced the day following the fire and continued for four months, and it would have taken three months to reproduce the hats, too long a time for Wheat still to get that season's trade. After diligent effort the insured was unable to get any other mill to manufacture them. The actual cost of manufacture was $1,841 and the selling price was $1,967. What is the insured entitled to on these hats?

16. Stiles insured his residence, worth $20,000, for $19,000 in 1928. He has been renewing the same policy ever since. What can he recover if the house is totally destroyed by fire?

17. It is said with reference to public utility regulation that there are three possible bases for valuation, cost of production, cost of reproduction, and cost of replacement. Are any of these used in the fire insurance contract?

18. Thomas had a property worth $12,000, which he insured for $5,000 with Company *A* and for $4,000 with Company *B*. He believed later that the property had increased in value and procured another policy in Company *C* for $1,000. All of these policies existed with the consent of all the companies involved. The property was totally destroyed by fire and proved to have depreciated to a value of $9,000. What are Companies *A*, *B* and *C* liable for, respectively?

19. Mason instructed his broker Bates on December 10th, to cover his (Mason's) property with insurance. Bates was dilatory and did not obtain the policy until December 14th, and the policy read, "from the 14th day of December, 1944, to the 14th day of December, 1945." Mason's property was located

in Utopia and was totally destroyed by fire at 11:30 a.m., December 14th, standard time. The company refuses to pay, but Mason claims indemnity on two grounds: (1) that by solar time the fire occurred at 12:15 p.m.; (2) that the insurance company is responsible for the delay by the broker. What is your opinion?

20. Yost had a fire insurance policy on his house, on which was endorsed a vacancy permit, allowing the property to be unoccupied for 30 days. When this insurance expired, it was renewed by a new policy that contained no vacancy permit. During Yost's absence the house burned. Can he collect? Suppose he had left the house unoccupied with the oral permission of the agent, given at the time the original policy was issued?

21. On April 1st the Flame Insurance Company sends the following cancellation notice to Fox, who holds one of their policies: "This is to notify you that this company elects to cancel and terminate its liability under Policy No. 857-624 at noon of April 4th." No reasons were furnished by the company or the agent who delivered the notice for desiring to cancel the policy. Give all your reasons for thinking this is or is not a valid cancellation.

22. Fritz is the owner of two buildings worth respectively $25,000 and $2,000, both insured under one standard fire policy. Would there be any advantage to him to have two separate policies?

23. Hotz has a five-year policy on his residence, written by his friend Kircher, who is agent for the Planet Insurance Company. Hotz goes away to live for four months every summer in his seashore cottage, accompanied by his whole family. In the year in question, while the policy was in force, Kircher visited Hotz's seashore cottage several times, at intervals of two weeks, and while Kircher was there Hotz's town residence was destroyed by fire. The insurance company refuses to pay the loss. If you were representing Hotz, what would you urge in support of his claim, and what do you think are your chances of success?

24. Gasparo had received three letters threatening to blow up his house with a bomb if he did not pay $300 over to the sender, but at the time that he insured his house the agent never asked him about intimidation and he said nothing regarding it. His house was destroyed by a fire, which started from an overturned lamp next door. Can the company deny liability for the loss?

25. The Merit Fire Insurance Company issues a policy covering $2,000 on a two-story, frame, shingle-roof house, $300 on household goods contained therein, and $700 on a frame barn and wagon and farm implements contained therein. Discuss the effect of the following upon the validity of the policy:

(a) The insured stated that the two-story house was used as a dwelling. On the first floor he maintains a general store.

(b) After the policy is issued, he mortgages the house without disclosing this fact to the insurance company.

(c) The wagon containing the farm implements and the implements are destroyed by fire while standing 25 feet away from the barn.

26. Wheat's barn was insured for $1,000 by the Uranus Insurance Co. The barn was totally destroyed by fire while the policy was in effect, and Wheat recovered $1,000 from the insurance company. Wheat thought the barn was worth about $2,000. He sued a railroad which passed beside his barn, alleging that the railroad negligently allowed its locomotive to emit sparks that were the cause of the fire. He was awarded $800 damages from the railroad, and the railroad paid. Can Wheat keep the $800? Why?

27. Carl owned a building and jigsaw puzzle business carried on therein. He insured the "building at 12 Walnut St., Crater, New York, and stock contained therein," under a New York 1943 policy, with no endorsements. He asked the agent if the policy covered his dies for cutting the puzzles, cardboard stock, and labels, and the agent asserted that it did. Seven months later he moved to Maryland and bought a policy from an agent there, containing no endorsements

and insuring "building and stock contained therein." He assumed the policy issued in Maryland furnished the same coverage as the previous New York policy. (a) Was the New York agent's statement correct? (b) Was Carl's assumption about Maryland correct? (c) Suppose Carl had asked the Maryland agent and the agent had assured him that these three items of stock were covered. Would the company be liable?

28. Make a comparison of the Massachusetts and New York 1943 policies with respect to (a) sole and unconditional ownership and (b) conditions causing suspension and voidance.

CHAPTER 19

Endorsements: Clauses

Necessity for endorsements. Because the standard policy form is rigid in nature and not adapted to all circumstances as it stands, it is frequently necessary to modify it by the addition of endorsements or "riders." For example, some endorsement *must* be made on the policy to give a description of the property insured, and other endorsements *may* be made by which certain policy provisions are waived or additional privileges permitted. It is in this connection that the fire insurance broker or agent is in a position to render the greatest service to his client. He should be able, by reason of his experience in insurance and his knowledge of the insured's business, to suggest endorsements that are necessary to adapt the standard form to the circumstances of the particular case. It is necessary, furthermore, that these endorsements be worded so as to give to the insured the protection he requires and believes that he is getting.

Classification of endorsements. Endorsements on the standard fire policy may be divided into two groups: (1) *forms,* which aim to supply something that is missing in the standard policy, and which either supply description or extend the coverage; (2) *clauses,* which are intended to alter some portion of the standard policy and are permissive or restrictive in character. These two terms, *forms* and *clauses,* are frequently used loosely and interchangeably in the business, and confusion is still further increased by the fact that a form and a clause are often combined on the same printed slip or even in the same paragraph.

Nature of clauses. A clause changes the situation that would exist under the standard printed policy (or the policy and the printed form attached to the policy). For example, there are certain items of property that the printed policy does not cover, but the company may assume liability for them by endorsement; the policy makes the company liable for the cash value of the property, but endorsements may increase or decrease this liability; the policy covers only direct damage, but endorsements may extend the protection to indirect results.

Permission to alter the policy provisions is given by the New York 1943 standard contract:

> **Added provisions.** The extent of the application of insurance under this policy and of the contribution to be made by this Company in case of loss, and any other provision or agreement not inconsistent with the provisions of this policy, may be provided for in writing added hereto, but no pro-

47 vision may be waived except such as by the terms of this policy
48 is subject to change.

The company and the insured may modify the provisions of the printed contract in any way agreed upon if such modification is not contrary to statute or common law. There is therefore no limit to the variety of clauses that may be added to a fire policy or the variety of wordings that may be incorporated in such clauses. Some standardization is introduced by (1) printed clauses that are supplied to agents and brokers, which are used by them for convenience when suitable, (2) prescription by rating boards and underwriters' associations of certain standard clauses that are required by the rule book or manual, and (3) requirement of a number of standard forms by the insurance department of the state.[1]

The clauses are classified herein according to the purposes they are designed to serve. Since it would take an entire volume to give merely the wording of all the various clauses in use, only the more common are here included. Books are available that give extensive collections of forms and clauses.[2] There are various policy forms in use in different states, and the illustrations that follow are not applicable, therefore, in all jurisdictions.

1. Permits. The standard fire policy, as has been noted, contains a number of provisions that the insurance company may be quite willing to waive, and a number of others that cannot be changed. Those provisions that may be waived give rise to various clauses permitting the insured to do something that, without the consent of the insurer, the policy prohibits. The following are illustrations of such permits, including some which, though unnecessary under the New York 1943 policy, are still important in connection with other standard forms:

(*a*) *Removal clause.* This permits the insured to move the property from the location described without voiding the policy. In policies covering household furniture, such a clause frequently covers the old and new locations in proportion to the values thereat for ten days.

(*b*) *Alterations and repairs clause.* This permits extensive alterations

[1] In New York it is provided by law that "the superintendent of insurance may make an examination of the books, records, policies, riders, endorsements, supplemental contracts and other documents of any insurer . . . . and if . . . . the superintendent determines that any riders, endorsements or other addendum for use in connection with a fire insurance contract should be uniform in this state . . . . he may . . . . prepare or cause to be prepared a standard form thereof . . . ." Also, "Any rating organization may at any time present to the superintendent for filing in his office, forms of riders, endorsements, clauses, permits or other addenda . . . . If the superintendent finds that such form or forms are not in conflict with law or with any official regulation, he may approve and file the same . . . . Unless and until such form is superseded . . . . any such form presented by a rating organization and approved as aforesaid shall be used by every insurer which is . . . . a member of such rating organization . . . . to the exclusion of any forms not approved by the superintendent covering substantially the same agreement." (Insurance Law of New York, 1939, Sect. 169.)

[2] See, for example, "The Underwriter's Book of Forms," Underwriter Printing and Publishing Co., New York, various editions.

and repairs to be carried on. It is a customary part of manufacturing and mercantile forms.

(*c*) *Vacancy clause.* This permits the premises to remain vacant for periods longer than normally allowed. Vacancy clauses granting permission for vacancy, for instance, during eight or ten months of the year are found in forms covering seasonal dwellings. They may be accompanied by warranties that the insured will keep the premises properly protected against trespassers.

(*d*) *Overtime operations clause.* This permits overtime operations or night work in a manufacturing establishment. It is common in manufacturing forms and is unnecessary for mercantile and dwelling risks.

(*e*) *Cease operations clause.* This permits manufacturing establishments to cease operations for 60 days after the period permitted by the standard policy. It is common in manufacturing forms, usually accompanied by warranties as to fire extinguishing equipment and watchman.

(*f*) *Other insurance clause.* This permits the acquisition of other insurance on the same property. In open cover contracts other insurance is permitted either without restriction or to the extent necessary to protect values in excess of the liability limits of the open cover policy.

(*g*) *Gas generation clause.* This permits the generation of acetylene gas on the premises.

(*h*) *Kerosene oil clause.* This permits the use of kerosene oil for lighting and cooking. It is common in farm policies.

(*i*) *Brooder clause.* This permits the operation of a limited number of brooders or incubators, notwithstanding that the use thereof within 50 feet of a building is usually prohibited in the farm form.

(*j*) *Dangerous articles clause.* This permits the presence on the premises of certain dangerous articles prohibited by the contract, such as naphtha, gunpowder, phosphorus, and the like. Of similar character are clauses permitting the use of appliances or machinery operated by gas, gasoline, kerosene, and the like.

(*k*) *Work and materials clause.* This permits such use of the premises as is usual to the type of occupancy insured, and permitting the use of such appliances, articles, and materials as are usual and incidental to such occupancy. This clause is frequently made a part of the printed form for the coverage of manufacturing properties.

(*l*) *Inventory clause.* This permits the insured to dispense with an inventory in small losses. It saves making an extensive inventory when the loss is less than 5 per cent of the face value of the policy.

These clauses, it is evident, are necessary to adapt the policy to the particular conditions of the risk. One of the services of the agent or broker should be to see that the insured is properly protected with such permits as are necessary. At the same time the agent's responsibility to the companies he represents restricts him from authorizing conditions that are exceptionally dangerous. The insured should be familiar with the policy conditions in order to recognize the necessity of permits for conditions arising after the policy is written, for otherwise policies may

be innocently violated although permits are available free or at small cost.

2. Decreasing the liability or hazard. In special circumstances there are some risks that the insurer does not desire to assume, and there are others that he is willing to assume only under stipulated conditions. Clauses adapted to meet these conditions are either clauses in which the insurer disclaims liability or clauses in which he disclaims liability unless certain precautions are taken by the insured. The following are illustrations.

(*a*) *Consequential damage clause.* This exempts the underwriter from liability for certain kinds of consequential damage, such as the loss resulting from a change in temperature of a cold-storage warehouse, or the consequential damage resulting from a fall in temperature in a greenhouse.

(*b*) *Dynamo clause.* This exempts the company from liability for damage to dynamos, switches, and electrical apparatus caused by electrical current unless it is the result of an outside fire.

(*c*) *Owner occupied clause.* This warrants that the premises will be occupied only by the owner and his family.

(*d*) *Automatic sprinkler warranty.* This warrants that in return for a reduced premium granted because of an automatic sprinkler system, the insured will maintain the system in good condition and will not make alterations in the water supply without consent.

(*e*) *Electricity warranty.* This permits the use of electricity accompanied by certain warranties as to the nature of the installation and its maintenance.

(*f*) *"Foundations clause."* This exempts damage to foundations from the coverage of the policy. These are ordinarily little damaged by fire, and the insured thereby takes this value outside of the scope of the coinsurance clause (see later).

(*g*) *Dry cleaning warranty.* This warrants that only approved dry cleaning fluids will be used.

(*h*) *Motion picture equipment clause.* This exempts the company from liability for loss or damage to the motion picture machine, films, or contents of the projection room.

(*i*) *Iron safe clause.* This requires the insured to take an annual inventory and to keep bookkeeping records in an iron safe, the object being to preserve records for the adjustment of losses. The clause is used principally for the insurance of store contents in country districts and villages with little fire protection where bookkeeping methods may be lax and more fires are extensive.

(*j*) *Personal property exclusion clause.* This is used on contents policies to exclude liability for other persons' personal property insured elsewhere, and for such items as metal ingots, ores, sand, and the like, the exclusions serving to reduce the amount of insurance necessary to comply with the requirements of the coinsurance clause, which is described later.

(*k*) *Exposure clause.* This requires the insured to obtain written con-

sent for any change in other buildings within 60 feet of the insured property.

(*l*) *Storage clause.* This limits the company's liability on furs and other articles held for storage or repairs to the value upon which the insured and the owner of the articles agreed at the inception of the bailment.

(*m*) *Watchman and clock clause.* This requires the insured to warrant that a watchman will be provided on the premises with an approved watchman's clock or other recording system.

(*n*) *Clear space clause.* This requires the insured to warrant that a certain amount of clear space will be maintained between piles of lumber and woodworking buildings. It is used in insuring lumber.

(*o*) *Brooder clause.* This prohibits the use of incubators or brooders within 50 feet of any building. It frequently appears in farm policy forms.

3. Clauses increasing the liability. The company may, by specific endorsement, assume liability for events or property not covered by the standard policy. Examples are:

(*a*) *Lightning and electrical apparatus clause.* This provides that the company assumes liability for losses from lightning on property other than electrical apparatus, but limits liability on electrical apparatus to the loss by fire, if any.

(*b*) *Market value clause.* This provides that the measure of indemnity is agreed to be the net market value of finished manufactured stock or the net selling price of mercantile stock.

(*c*) *One-hundred feet extension clause.* This provides that the insurance company assumes liability for contents of manufacturing or mercantile risks while such contents are in railroad cars on switches or sidetracks on the premises or within 100 feet of the buildings described, in the open on the premises, on platforms adjoining buildings, or on streets or detached platforms within 50 feet of the buildings.

(*d*) *Contents in outbuildings clause.* This covers household and personal effects located in outbuildings to a value not exceeding 10 per cent of the face value of the policy. It is used in household furniture forms.

(*e*) *Subrogation clause.* This consents to a waiver already made by the insured of his legal rights of action against a railroad for damage done by the railroad for which it otherwise might be legally responsible. The waiver is customarily exacted by the railroad as a condition for furnishing the railroad service, although the policy states that the insurance company is subrogated to all the rights of the insured upon payment of a loss, and the insurance clause merely acquiesces to the situation.

It is difficult to draw the line of distinction between these clauses, which increase the liability of the company, and various other clauses and supplementary contracts, in which the insurance company assumes liability for the results of explosion, riot, water damage, windstorm, and the like, which have been treated as forms. Although the classification is necessarily to some degree arbitrary, it is sufficiently consistent to direct attention to the nature of the various endorsements.

4. Clauses respecting title and interest. These are clauses that are necessary in order to define the insurance of an interest other than sole and unconditional ownership, or personal property encumbered by a lien. The following examples include nearly all of this group.

(*a*) *Mortgagee clause.* This gives additional security to a mortgagee by exempting him from liability for the acts or omissions of the owner, he in turn promising to do certain things for the benefit of the company. This clause was fully discussed in the chapter on *Insurable Interest.*

(*b*) *Loss payable clause.* This states that the loss, if any, is payable to a named party or parties, as their interests may appear. In many states its protection to a mortgagee is inferior to that provided by a mortgagee clause. This clause also was fully discussed in the chapter on *Insurable Interest.*

(*c*) *Commission clause.* This requires the company to assume liability for property of similar character to that described in the form, whether owned by the insured, or sold but not removed, and also to assume the insured's liability for and interest in property held by the insured in trust or on commission, on joint account with others, or on storage, or for repairs. This clause, very common in manufacturing and mercantile stock forms, was discussed in the chapter on *Insurable Interest.*

(*d*) *Chattel mortgage clause.* This covers the insured's interest on goods purchased on the installment plan, even though the goods are mortgaged in contravention of the standard policy's prohibition of mortgages on personal property. This clause is frequently found in policies on dwellings and contents, and household furniture.

(*e*) *Consent to assignment.* The policy contains an assignment blank, which is accompanied by a form for the consent of the company. When signed, the form constitutes a clause protecting the assignee.

5. Emergency clauses. These are unusual in the United States. They provide for the cessation of all insurance upon the occasion of great natural disturbances such as earthquake, volcanic eruptions, hurricane, or other eruption, convulsion, or disturbance of nature.

In this country there is in common use a "binder," which is an agreement by the company to give immediate protection, pending consideration of issuing a complete written contract, it being understood that the binder implies all the provisions of the printed standard policy, except as otherwise stated on the binder. It is thus a convenient substitute for the policy, affording temporary protection, usually until the policy is issued. If the company decides to decline the risk, it should be noted, it may terminate the insurance on one day's notice, instead of the five required by the standard printed policy.

The binder has great practical use, enabling an insured to obtain immediate insurance protection without waiting for the company to prepare the policy in all detail. The brief outlines of location, amount, and other important points are written on a binder form, presented to the company underwriter, and on his signing the form the insurance is considered in force. Binders are used in many fields of insurance.

6. Clauses limiting the amount payable. The standard printed policy obligates the company to pay the cash value for property damaged by fire. The clauses in this group serve to modify or amplify this condition of the policy. They are used (a) to influence the actions of the insured prior to a loss, (b) to distribute the insurance equitably over the property, and (c) to simplify the adjustment of losses.

(*a*) *Three-fourths value clause.* This provides that in the event of loss the company shall not be liable for more than three fourths of the cash *value of the property* at the time of the loss. The object of the clause is to compel the insured to carry a portion of the risk himself and thereby induce him to exercise care so as to reduce the risk. For example, if a property is worth $10,000 and is insured for $7,600, on a $7,800 loss the insured could recover only ¾ of $10,000 or $7,500. Since the clause limits the company's liability only on losses that are 75 per cent or greater, it is especially useful on properties without fire protection, which in case of fire would probably be total losses. Inasmuch as in the event of loss one fourth of it will have to be borne by the insured himself, he is constrained to exercise care to prevent fires. The endorsement of the clause enables the risk to be written at a lower premium than would otherwise be possible.

(*b*) *Three-fourths loss clause.* This limits the liability of a company to three fourths of the *total loss sustained.* The object and results of this clause are similar to those of the three-fourths value clause, but its provisions are even stricter. The three-fourths loss clause requires that the insured bear one fourth of *every* loss himself, however large or small. This requirement makes it useful for cases in which carelessness or moral hazard might be involved. For example, if a property is worth $10,000 and is insured for $7,600, on a $7,800 loss the insured could recover only ¾ of $7,800, or $5,850.

Whereas the three-fourths value clause protects against overinsurance, the coinsurance clause, next described, protects against underinsurance.

(*c*) *Coinsurance clause.*[3] This provides that the company shall be liable in the event of loss only in the proportion that the amount of insurance bears to the insurance required. Thus, an 80 per cent coinsurance clause requires that insurance be taken to the extent of at least 80 per cent of the value of the property. Having met this requirement as to amount, the insured has no further problem; whatever his loss, that much his insurance will pay (not exceeding, of course, the total amount of his insurance). Otherwise the insured becomes a "coinsurer" for the difference. An 80 per cent coinsurance clause requires that the insurance taken shall be equal to 80 per cent of the value of the property. This is a most common and important clause in fire insurance and an illustration of its operation will be useful.

Assume that a property is valued at $10,000 and is insured for $7,600

[3] This clause, in different but synonymous wordings, is also known as the percentage value clause, reduced rate percentage value clause, average clause, contribution clause, and reduced rate contribution clause.

under a policy containing an 80 per cent coinsurance clause. This clause requires that the insured shall take insurance to the extent of 80 per cent of the value of the property ($8,000), but he has taken only $7,600 insurance, and, consequently, in the event of a $7,800 loss, he would be paid only that proportion of the loss that the insurance taken ($7,600) bears to the insurance required ($8,000), or nineteen twentieths. He would therefore receive 19/20 of $7,800, or $7,410, instead of the full indemnity, because he failed to carry the amount of insurance required. Suppose that under the same circumstances the loss had been total. Nineteen twentieths of his loss would be $9,500, but his recovery is limited by the face value of his policy to $7,600.[4]

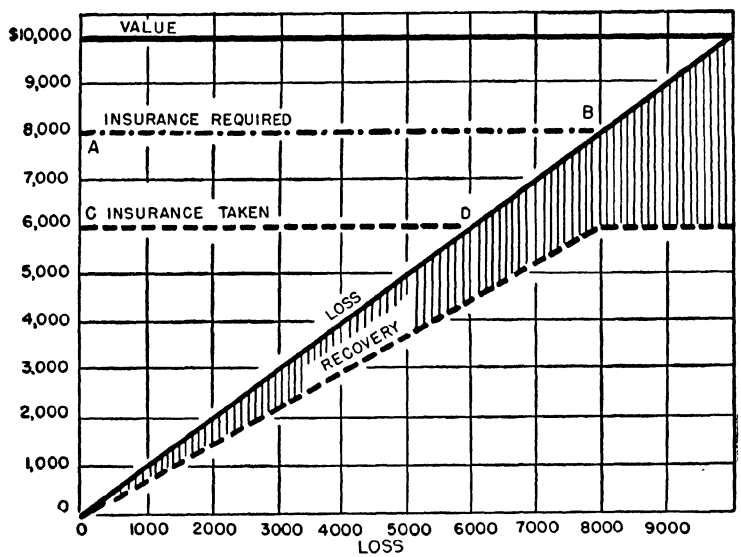


Fig. 17. Operation of 80 Per Cent Coinsurance Clause where Insurance Is 60 Per Cent of Value

The operation of an 80 per cent coinsurance clause for losses of various sizes is illustrated by the accompanying diagram, in which the value is $10,000, the insurance required $8,000 and the insurance taken $6,000. The shaded area shows the portion of the loss which is uncollectible. Note that this area is equal to the area ABCD.

The clause reads as follows:

---

[4] It may be worth while here to compare in a table the operation of the three-fourths value clause, the three-fourths loss clause, and the 80 per cent coinsurance clause, when a property valued at $10,000 is insured for $7,600:

Clause	*Value*	*Insurance*	*Recovery for loss of* $7,800	$780
3/4 Value	$10,000	$7,600	7,500	780
3/4 Loss	10,000	7,600	5,850	585
Coinsurance	10,000	7,600	7,410*	741*

* But it should be noted that if the insurance were $8,000 *all* losses up to $8,000 would be paid in full.

This Company shall not be liable for a greater proportion of any loss or damage to the property described herein than the sum hereby insured bears to per cent (%) of the actual cash value of said property at the time such loss shall happen, nor for more than the proportion which this policy bears to the total insurance thereon.

In the event that the aggregate claim for any loss is both less than ten thousand dollars ($10,000) and less than five per cent (5%) of the total amount of insurance upon the property described herein at the time such loss occurs, no special inventory or appraisement of the undamaged property shall be required.

The object of the coinsurance clause is frequently misunderstood, because it is usually considered as applying to loss payments, whereas it is more logical to consider it as a part of the rate-making system. The reason for its existence lies in the fact that the great majority of losses are partial rather than total. This fact is illustrated by Table 30.[5]

TABLE 30

FIRE LOSSES CLASSIFIED ACCORDING TO SEVERITY

Per cent of Loss to Value	*No. of Losses*	*Average Loss per $10,000 Property*
From 0 to 10%	751	$ 500
" 10 " 20	107	1,500
" 20 " 30	47	2,500
" 30 " 40	30	3,500
" 40 " 50	20	4,500
" 50 " 60	16	5,500
" 60 " 70	12	6,500
" 70 " 80	9	7,500
" 80 " 90	5	8,500
" 90 " 100	3	9,500
	1,000	

Probably at least 70 per cent of the losses are under 10 per cent of the value of the property, and only one loss out of twenty-five is a total loss in cities.

The financial operations of an insurance company are based upon the assumption that it takes in premiums (P) sufficient to cover the total indemnity recovered by insureds (R), and in fixing the rate there is considered a certain per cent of insurance (I) to value (V). Thus if (r) is a fraction representing the risk,

$$P = L = r \times V.$$

But the recovery

$$R = r \times I.$$

It is plain that the recovery (R) cannot equal losses (L) unless the insurance (I) at least equals value (V) or unless (r) is made greater than in the first equation.

Inasmuch as few losses are total, a lower rate could be quoted to a person taking 100 per cent insurance than to one taking 10 per cent. On a $10,000 building a loss of $1,000 would be a total loss to the company in the latter case and only a 10 per cent loss in the former case. Now, if the same rate is charged these two property owners, there is only one

[5] See Whitney, A. W., "The Conflagration Hazard and Coinsurance," in *Fire Underwriters' Association of the Pacific*, 1906.

other way of protecting the solvency of the insurance company and maintaining equity between the persons insured—that is to limit the amount that the underinsured person can collect in the event of loss. These two methods of (1) adjusting the rate or (2) adjusting the amount payable for losses can be made mathematically equivalent.

Viewed from the standpoint of the insured the coinsurance clause is equally necessary. If everyone could take whatever percentage of insurance he pleased and could receive the same rate, the statistics cited above would show on a moment's consideration the financial benefit, in most cases, of taking only a small amount of insurance. The person taking a large proportion of insurance to value, however, would be paying part of the premiums of those who were unwilling to take sufficient insurance. If, on the other hand, everyone took a small proportion of insurance to value, all rates would have to be materially increased.

The coinsurance principle may be justified on three grounds, although the manner in which it is applied may be questioned.

1. It is necessary for justice between property owners. Suppose that two owners, *A* and *B*, each owning a property worth $10,000, are charged a rate of 1 per cent for the insurance. *A* takes $10,000 of insurance, but *B* takes only $2,000 insurance. *A* pays a premium of $100, and *B* pays only $20. Each has a $2,000 loss and each collects his full loss, although *A* has paid five times as much premium as *B*. If it be argued that *A*'s larger policy will enable him to collect larger losses, it may be said that 85 per cent of the losses are less than 20 per cent losses, with the result that in 85 cases out of 100 they will both collect on an equal basis.

2. Coinsurance is an integral part of the rating system. Suppose that the chance of loss on a property is $1 out of $100. If the value of the property is $20,000, the probable loss will be $200, and the company will have to collect that much in premiums. If the full value is insured, a rate of 1 per cent will produce the required premiums, but if only $10,000 insurance is taken, 2 per cent will be required to produce the needed premium. The following table will illustrate that as the insurance taken is reduced, the rate must be increased.

Value	*Prob. Loss*	*Prem. Required*	*Ins. Taken*	*Rate*
$20,000.....	$200	$200	$20,000	1%
20,000.....	200	200	10,000	2
20,000.....	200	200	5,000	4

For every per cent of insurance to value there is an appropriate rate just sufficient to produce the necessary income, as shown by the following table. The table demonstrates this for three assumptions, that the insured carries 100 per cent insurance, 80 per cent insurance and 60 per cent insurance. Obviously, similar calculations could be made for 90, 70 or any other assumed per cent of insurance to value. The distribution of losses from the table previously given on page 399 has been slightly changed in order to shorten calculations. No reliable figures have been published to show the actual distribution. A table given in a report to the New York Legislature some years ago cited no source.

For illustration assume that 10,000 properties are insured, each worth $10,000, and that 1,000 are damaged by fire. The 1,000 damaged properties have losses ranging from $1 to $10,000, classified according to severity in ten classes in Table 31.

TABLE 31

RATES REQUIRED FOR VARIOUS AMOUNTS OF INSURANCE

Loss on Each Property	*Number of Properties*	*Aver. Loss on Each*	*Amount of Insureds' Recovery Assuming*		
			100% Insurance	*80% Insurance*	*60% Insurance*
$ 0 - 1,000...	730	$ 500	$365,000	$365,000	$365,000
1,000 - 2,000...	110	1,500	165,000	165,000	165,000
2,000 - 3,000...	50	2,500	125,000	125,000	125,000
3,000 - 4,000..	30	3,500	105,000	105,000	105,000
4,000 - 5,000...	20	4,500	90,000	90,000	90,000
5,000 - 6,000...	20	5,500	110,000	110,000	110,000
6,000 - 7,000...	10	6,500	65,000	65,000	60,000
7,000 - 8,000 .	10	7,500	75,000	75,000	60,000
8,000 - 9,000...	10	8,500	85,000	80,000	60,000
9,000 - 10,000..	10	9,500	95,000	80,000	60,000
	1,000		1,280,000	1,260,000	1,200,000
Total Insurance on 10,000 Properties ..			$100,000,000	$80,000,000	$60,000,000
Rate per $100 Insurance, therefore is...			$1.28	$1.575	$2.00

If, however, the 100 per cent coinsurance clause is placed on each policy, and the recovery when $8,000 insurance is carried is to be 8/10 of the loss up to the face of the policy, the insurance can be written at the 100 per cent insurance rate. Or if the 80 per cent coinsurance clause is placed on each policy, and in the event of $6,000 insurance only 6/8 of the loss be paid, the rate can be the 80 per cent insurance rate. This possibility is shown by Table 32.

These tables show that the application of certain coinsurance clauses to losses produces the same effect as modifications in rates, as far as the insurance company is concerned. The two processes are not equivalent, as we shall see, as far as all the individual persons insured are concerned.

3. The fire loss may be regarded as something that the insured community as a whole has to bear, and something to be collected in the form of a tax. Taxes are ordinarily levied by applying a rate of taxation to an assessed value. The nearer the assessed value is to the full value, the lower the tax rate can be and the more equitable is the taxation. The person taxed has never been allowed to fix his own assessment. The fire tax is likewise collected by a rate (rate of premium) and an assessment (face of policy). It is as impossible to allow the insured to fix the face of the policy as it is to allow the taxpayer to fix the assessment on his property, unless some increase is made in the rate.

There are several methods by which the coinsurance *principle* may be *applied*. In the first place, insurance companies might require insureds to take a certain amount of insurance and refuse to write less. Such a

requirement, in practice, is impossible, because (a) the company would have to evaluate every property offered for insurance, and (b) it has the appearance of a device to increase the company's premium income. In a way it may be said that the application of the coinsurance principle is utilized in reporting forms of policies, in which only reported values are insured. Examples are some of the open cover contracts in fire insurance and the accounts receivable insurance endorsements. It is used

TABLE 32

EQUIVALENCES OF VARIOUS COINSURANCE CLAUSES TO RATES

Number of Properties	*Aver. Loss on Each*	*Recovery by Insured under Application of*			
		100 Per Cent Clause on $8,000 Policy		*80 Per Cent Clause on $6,000 Policy*	
		Each	*Total*	*Each*	*Total*
730	$ 500	$ 400	$292,000	$ 375	$273 750
110	1,500	1,200	132,000	1 125	123 750
50	2,500	2,000	100,000	1 875	93 750
30	3,500	2.800	84,000	2,625	78.750
20	4.500	3,600	72,000	3,375	67.500
20	5 500	4,400	88,000	4,125	82 500
10	6,500	5.200	52,000	4 875	48 750
10	7.500	6,000	60,000	5 625	56 250
10	8 500	6 800	68,000	6 000	60,000
10	9 500	7,600	76,000	6,000	60 000
			1,024,000		945.000
Total Insurance			$80,000,000		$60.000,000
100% Coinsurance Rate			1.28		
80% Coinsurance Rate					$1.575

also in policies that name definite indemnities for specified events, as in rent insurance forms in which the policyholder must insure 100 per cent of the rent he expects as indemnity, in forms of rain insurance in which 50 per cent of the anticipated income must be insured, and in the coinsurance form of use and occupancy insurance, in which at least 90 days' ordinary payroll must be insured.

In the second place, the company may adjust the rate charged to the per cent of insurance taken. To an insured who buys 100 per cent protection the rate may be $1.28 per $100, whereas to an insured who buys 60 per cent protection the rate may be $2.00 per $100. But this application of the principle requires some verification of the actual value of the property insured. To make an appraisal of every item of property insured would be difficult (a) because the expense involved would tend to increase the cost of insurance and (b) because many difficult appraisals would result although most of them would never incur any loss, and (c) if graded rates were to be set up for all per cents of insurance to value, it would be difficult to obtain satisfactory statistics on which to base the differentials.

This method has in theory, however, several points to recommend it,

namely: (a) that the burden of adequate insurance would be spread over all policyholders who pay premiums, regardless of whether they have losses or not; and (b) that the insured would not be penalized for failure to adjust his insurance taken to value, after the issuance of the policy. But the expense and difficulty involved preclude its use.

Graded rates can be applied, however, if the valuation of the insured property and the determination of insurance to value is deferred until a loss has occurred. This is the easiest procedure, because it is unnecessary to evaluate all property insured but only that on which losses occur, and such evaluation is often necessary anyway. Also, quotation of rates is simplified, because rates are not affected by percentage of insurance carried, but only by the amount of insurance required. Only three or four rates are necessary, say those for 80, 90 and 100 per cent coinsurance clauses. In many instances there are only an 80 per cent rate and a "flat rate," meaning a rate requiring no specified per cent of insurance to value.

The insured who receives an 80 per cent rate has an 80 per cent coinsurance clause attached to his policy. If he complies with it, his losses are paid in full up to the face of the policy, but if he does not take the amount of insurance required, this fact will develop at the time of the loss and his recovery will be reduced accordingly.

Illustrations of this application of the coinsurance principle are very numerous. It is applied with few exceptions in all forms of fire insurance. In windstorm insurance, rates are graded for insurance to value ratios ranging from 50 to 90 per cent. In riot, explosion, and aircraft damage insurance, a basic rate assumes 50 per cent insurance with credits and debits for ratios above and below this figure. In the coinsurance form of use and occupancy insurance, the earnings and fixed expenses item carries an 80 per cent requirement, whereas the ordinary payroll item demands only 25 per cent coverage; but the rate for the latter is much higher. In leasehold insurance, 100 per cent of insurance to value is obligatory. The effect of a 100 per cent coinsurance clause is achieved in the per diem use and occupancy form by the specification of a per diem indemnity. One hundred per cent coinsurance is the universal practice in ocean marine insurance.

It is an unfortunate method, however, in several respects. The burden of inadequate insurance falls not on those who have inadequate insurance, but on those who have *losses* and inadequate insurance. Only the unfortunates who have losses pay the additional cost. It also leads to overemphasis on purely arbitrary ratios of insurance to value, such as 80 per cent, to the exclusion of rate credits for larger per cents. This tendency is partly due to the natural disinclination to multiply the number of rates quoted. Furthermore, it establishes as the criterion of compliance with the clause the ratio of insurance to value at the time of the loss, and not the ratio at the time the insurance is placed. It may therefore happen that through unfamiliarity with the coinsurance clause or neglect, the insured innocently fails to increase his insurance as values advance or that he fails to reduce his insurance as values decline.

In some jurisdictions the practice is to quote 80 per cent rates, with a table showing amounts to be added for insurance without the 80 per cent clause. These amounts vary somewhat in accordance with the magnitude of the 80 per cent rate. Thus an 80 per cent rate of $.20 becomes a flat rate of $.38, an 80 per cent rate of $2.00 becomes $2.20, and so on. In territories where the Analytic schedule is applied, schedule-rated risks receive percentage credits according to the coinsurance clause used. For a policy on a fireproof building, for instance, a 50 per cent coinsurance clause carries a 56 per cent credit on the rate, a 60 per cent clause 62 per cent credit, a 70 per cent clause 66.5 per cent credit, and so on. On dwellings of nonfireproof construction, the credit is usually very small and the coinsurance clause is often not used. Various other methods of treatment have been proposed, but these illustrations exemplify the methods in use in the principal ratemaking territories.

Unfortunately, the "five per cent waiver clause" (shown in the second paragraph of the clause on page 399) has come to be associated with the coinsurance clause. The former has nothing to do with the latter, for it merely waives the right to require a special inventory, and does not concern the application of the coinsurance principle. Sometimes 2 per cent is used as the loss limit instead of 5 per cent.

d. The pro rata distribution clause. The object of the pro rata distribution clause (sometimes also called the average clause) is essentially different from that of the three clauses just discussed. They were designed to provide for various kinds of loss adjustments under particular circumstances, whereas the pro rata distribution clause provides for the distribution of the insurance in force. It reads, "this policy to attach in each building or locality in proportion as the value in each bears to that in all." It is true that this clause fixes the limit to which any policy is liable in any one particular place, or on any specified property, but if insurance is carried to the full value of all the property, the loss payment will not be limited by this clause. On the other hand, if the property is underinsured, then under this clause it is equally underinsured in every location. If the owner takes 50 per cent insurance to total value he is 50 per cent underinsured in each location that the policy covers, irrespective of how the total value is distributed among the different locations.

The application of the clause is best illustrated by an example. Suppose $20,000 of property to be covered by insurance; $12,000 worth in location *A*, $3,000 in location *B*, and $5,000 in location *C*. There are four methods open to the insured.

First, he may take out a specific policy on each location. But if the value of the goods at the various locations changes, the insurance policies must be changed to correspond; otherwise he may have too much insurance at one location and too little at another. This process is disadvantageous, not only because he runs the risk of not complying with the coinsurance clause if one is attached, but because it is difficult to watch the changes in values.

Second, he may obtain a blanket policy, without a pro rata distribution

clause. This course has one advantage, that the entire amount of the policy will be available to cover any location in which a loss occurs, and if it were not for the coinsurance clause that is almost invariably attached, the insured would need to carry a policy only as large as his largest value. But blanket policies without the pro rata distribution clause are usually written with a 90 per cent or 100 per cent coinsurance clause, so that to recover even small losses in full the insured must carry $18,000 or $20,000 insurance, respectively.

Third, if he takes a blanket policy with pro rata distribution clause attached, an 80 per cent coinsurance clause is frequently used, and he can, if he desires, take only $16,000 insurance and still have small losses paid in full. The following table illustrates how this process would operate in the case mentioned.

Location	*Property*	*Proportion*	*Insurance*
A.....	$12,000	12/20	$9,600
B.....	3,000	3/20	2,400
C.....	5,000	5/20	4,000
	$20,000		$16,000

Since the insured is carrying the 80 per cent insurance required, he can recover in full for any loss in location *A* up to $9,600, in location *B* up to $2,400, and so on. As the values in the different locations change, the insurance on the locations will automatically change, but the insurance in each location will always bear the same relation to the value in that location. Thus, to take an extreme case, if all the values shift to location *A*, all the insurance will shift to location *A*.

Last, he may insure contents at the various locations under a general cover form, as described in Chapter 20, pp. 418-420.

The pro rata clause is used extensively not only in connection with blanket policies of fire insurance but also for collateral fire insurance lines. In windstorm, explosion, aircraft damage, extended coverage, and war risk clauses, there is a provision that the insurance on each pane of plate glass is the same percentage of the value of the pane that the face of the policy bears to the value of the building: that is, the face of the policy is divided between building and glass in the same proportions as the values of building and glass.

In profits and commissions insurance, the recovery of profits under one form is in direct proportion to the amount of damage to the goods. In extra expense insurance, the extra expense must be distributed over at least three months and cannot exceed 40 per cent of the face value in any one month. In burglary insurance, the total insurance must be divided among the various kinds of property so that not more than a named amount applies on property subject to heavy loss. In a sprinkler leakage policy, the recovery on dies and patterns is limited to 10 per cent of the face of the policy. All of these are variations of the average or pro rata clause.

5. Deductible clause. This provides that the insured must bear, say,

the first 5 per cent or the first $100, as the case may be, of any loss himself. Sometimes a fixed amount is named, and sometimes a percentage. This provision entails two consequences: (a) that the insured always loses a small amount in the event of damage to the property; (b) that the company is relieved of the payment of small losses that do not at least equal the deductible amount. Since small losses are very numerous and the total expense of adjusting and settling them is quite large, such a provision makes possible a considerable reduction in rate. This clause actually has the same effect as an excess loss provision, the company contributing only to the extent that the loss exceeds the stipulated amount.

Strangely enough, it is less used in fire insurance than in other lines of insurance. In the Pacific Coast form of earthquake insurance, the deductible amount is 5 per cent of the face of the policy. In the endorsement insuring against malicious mischief, a $100 deductible clause is used. In accounts receivable insurance, the ordinary amount of bad debts, for which the company is not liable, constitutes the deductible amount. In credit insurance, in which the deductible amount is known as the initial loss, the clause is similarly used. Open covers in fire insurance, being excess loss contracts, are similar in operation to a policy containing a deductible provision, except that another policy is first drawn upon rather than the insured. It will be perceived that the deductible clause also resembles the "waiting period" in accident and compensation insurance, for which no indemnity is paid. Another variation of the idea is found in ocean marine insurance, in which the company disclaims liability for small losses but pays in full if the loss exceeds the stipulated amount. In this form, the clause merely eliminates small losses and the expense of settling them. This variation also has its counterpart in compensation laws, in which compensation is payable for the first week of disability only if the disability exceeds one week.

6. Two-thirds vacancy clause. When vacancy is a serious hazard, either a charge may be made for a vacancy permit or a two-thirds vacancy clause attached. The latter provides that while the premises are vacant the amount of insurance (or sometimes the amount of any loss) shall be reduced by one third.

Summary

I. Endorsements are used to adapt the printed policy to the needs of the insured, namely:
   A. Clauses, which change the policy conditions.
   B. Forms, which supply something missing in the policy.
II. Clauses are only partly standardized and include, for examples:
   A. Permits, which allow something otherwise prohibited, such as,
      1. Removal clause.
      2. Alterations and repairs clause.
      3. Vacancy clause.
      4. Overtime operations clause.
      5. Other insurance clause.

B. Clauses decreasing the liability or hazard,
   1. Consequential damage clause.
   2. Dynamo clause.
   3. Owner occupied clause.
   4. Automatic sprinkler warranty.
   5. Electricity warranty.

C. Clauses increasing the liability,
   1. Lightning and electrical apparatus clause.
   2. Market value clause.
   3. One-hundred feet extension clause.
   4. Contents in outbuildings clause.
   5. Subrogation clause.

D. Clauses respecting title and interest,
   1. Mortgagee clause.
   2. Loss payable clause.
   3. Commission clause.
   4. Chattel mortgage clause.

E. Emergency clauses,
   1. Binder.

F. Limiting the Amount Payable,
   1. Three-fourths value clause.
   2. Three-fourths loss clause.
   3. Coinsurance clause.
      a. If complied with, furnishes full indemnity.
      b. Is part of the rate system.
      c. Clauses and rates may be made equivalent.
      d. Justification of the principle.
      e. Different applications of the principle.
      f. Arguments for and against the clause.
   4. Pro rata distribution clause.
      a. Its operation.
      b. Combination with coinsurance clause.
   5. Deductible clause.
   6. Two-thirds vacancy clause.

Readings

See also references to chapters 17, 18 and 20.

Medlicott, W. B., "Fire Insurance Policy Forms and Clauses." *Lectures on Fire Insurance,* Boston: Insurance Library Association, 1912, pp. 332-379.

Huebner, S. S., Amrhein, G. L. and Kline, C. A., *Property Insurance.* New York: Appleton-Century Co., 1938, Chap. XIII.

Whitney, A. W., "The Coinsurance Clause." *Fire Underwriters' Association of the Pacific,* January 13, 1904.

Watson, Leon A., "New Jersey and New York Coinsurance Clauses." *The Eastern Underwriter,* January 23, 1925.

Riegel, R., "Coinsurance." *Journal of American Insurance,* July, 1945.

Barbour, R. P., *Agent's Key to Fire Insurance.* Philadelphia: Spectator Co., 1939.

The Weekly Underwriter, *The Underwriter's Book of Forms.* New York: Underwriter Publishing Co., various dates.

Harrington, Geo., "Use of Forms and Clauses," Insurance Society of New York, December 9, 1932.

Magee, J. H., *Property Insurance.* Chicago, R. D. Irwin, 1941, Chap. IX.

Problems

1. A policy contains a "loss payable" clause making the insurance "payable to mortgagee as his interest may appear." The insured vacates the property for 120 days. What is the effect upon the mortgagee?

2. A property worth $20,000, it is estimated, has foundations worth $3,000. The insurance company will write the insurance on the property only with a 100 per cent coinsurance clause attached. How can the insured reduce the amount of insurance he is required to carry?

3. A property worth $20,000 is insured for $8,000. A loss of $4,000 occurs. How much can the insured recover:

(a) If the policy contains a "three-fourths value clause"?
(b) If the policy contains a "three-fourths loss clause"?
(c) If the policy contains an 80 per cent coinsurance clause?
(d) If the policy contains a 5 per cent deductible clause?
(e) If the policy contains a two-thirds vacancy clause and the property is vacant at the time of the fire?

What would the answers be if the loss is $10,000?

4. If the rate on a given class of properties is calculated to be $1.575 per $100 insurance, based on 80 per cent insurance to value, what discount from the rate can be given for 90 per cent insurance, provided that there are 1,000 losses on 10,000 properties and that losses are distributed as follows:

Ratio of Loss to Value	*Percentage of Cases*
0 to 10%	73
10 to 20	11
20 to 30	5
30 to 40	3
40 to 50	2
50 to 60	2
60 to 70	1
70 to 80	1
80 to 90	1
90 to 100	1
	100

5. Is the coinsurance principle applicable to life insurance? Why or why not? Why is it not used in automobile insurance?

6. Goods valued at $30,000 are distributed as follows: location *A*, $12,000, location *B*, $10,000, and location *C*, $8,000. They are insured for $15,000 under a blanket policy containing a pro rata distribution clause and an 80 per cent coinsurance clause. There is a loss of $6,000 at location *C*.

(a) What can the insured recover?
(b) On a loss of $6,400 at location *C* what can the insured recover?

7. Insured covers property with $20,000 insurance, policy containing five per cent waiver clause and 80 per cent coinsurance clause. Loss occurs which is agreed to amount to $1,470.

(a) If it is agreed that the property had a total value of $25,000 at the time of the loss, how is the loss settled?
(b) If the insurance company contends that the property had a total value of $30,000 at the time of the loss, what is the situation?

8. The *X* Company has lent $200,000 on mortgages. It obtains an errors and omissions coverage for $30,000, with a 20 per cent coinsurance clause. A property worth $20,000 and mortgaged for $15,000 is damaged to the extent of $10,000, and is found not to be covered by the ordinary fire policy. What can the mortgagee recover under each form of errors and omissions coverage?

9. The merchandise in *A*'s store is worth $5,000, and he insures it for $4,000,

receiving a reduced rate because the policy contains an 80 per cent coinsurance clause. He has a fire that damages the merchandise to the extent of $600, and it is found that the value of the goods in the store at the time of the fire is $6,000. What can the insured recover?

10. The 80 per cent coinsurance rate for a retail stationery store is $.20. Should the insured receive a lower rate if he insures for the full value?

11. Give two examples of "permits." Of clauses decreasing the liability of the company.

12. Which of the following clauses may be needed on the New York standard fire policy? (a) lightning clause, (b) explosion clause, (c) fallen building clause, (d) watchman and clock clause, (e) chattel mortgage clause. Which of these may be needed on the policy used in your state?

13. What clauses would be useful to the insured on a policy insuring household furniture?

14. Why does a company sometimes attach to a policy a "dynamo clause"? (Description of clause on p. 394).

15. What is the usual warranty with respect to the electrical wiring in a residence?

16. On what type of insurance policy would a "storage clause" be useful? (Description of clause on p. 395).

17. Manus has the residence on his farm covered by a fire insurance policy without endorsements other than a form that covers "storm doors and windows, belonging to above-described building, while a part of and attached to the building." Manus takes the storm sash off the windows in the spring and stores them in the barn, which is not insured. A fire in the barn destroys the storm sash. Can he recover for the storm sash on his residence policy? What is suggested by this case?

18. Wilkinson's asbestos insulating concern was insured under a printed policy form without any endorsed clauses. He requested the Alomissing Railroad Co. to run a siding on to his property, and, in order to obtain the siding, he signed a waiver, holding the railroad harmless for any damage which might be occasioned by the operation or presence of the siding. How would you advise Wilkinson?

19. What is the usefuness of a "commission clause"? (Description of clause on p. 396).

20. What clause is nearly always attached to policies on summer residences?

21. For what types of stock is a "market value clause" suitable? (Description of clause on p. 395).

CHAPTER 20

Endorsements: Forms

In the preceding chapter it was shown that although clauses alter some portion of the standard fire policy, *forms* are supplementary to it and supply something that would otherwise be missing. Forms may be subdivided into two classes: (1) those that are intended to describe who and what is insured and where the property is located, and (2) those that insure against risks not covered by the fire insurance policy, such as profit insurance, riot and civil commotion insurance, consequential damage insurance, sprinkler leakage insurance, unearned premium insurance, and the like.

Descriptive forms. These fall into the following categories:

1. Ownership. This portion of a form is intended to describe *who* is insured. The general rule is that the description should be as specific and accurate as possible except in cases where it is *purposely* made general to cover more than one person or interest. The nature of any interest other than sole and unconditional ownership should be stated. In the case of a firm whose partners change, or of a partnership that changes to a corporation, a question may arise as to whether the policy continues to cover the new arrangement. The words "as now or hereafter constituted" are therefore frequently added to the form in partnership policies. But there are many cases in which the interest is not sole or unconditional.

The insertion of the name of the insured can take various forms and in these forms the interest of the insured should be very exactly described. To illustrate, in some state standard policies the policy provision is violated if the property is owned by a wife, and insured in the name of her husband, or if the property is owned by a firm and insured in the name of an individual. Property may be insured in the name of a person's estate. A form may also be added to the policy stating that it is understood that the building covered by the policy stands on leased ground, if the form is necessary in order to avoid the prohibition in some state policies of such a condition.

Policies of a number of states provide that a chattel mortgage shall not exist without the knowledge and permission of the company. This fact must in such cases be disclosed in the description of the interest of the insured. Such chattel mortgages frequently arise from the purchase of machinery, and their existence must be acknowledged if required by the policy. The provision against foreclosure in some state policies is sometimes waived and permission given for the execution of contracts of sale which are stated not to prejudice the insurance.

It is frequently necessary for a person to insure goods belonging to others, and the so-called "commission form" is commonly used for this purpose. A description may be inserted covering goods "either owned or held by them in trust, or on commission, or sold but not delivered or removed, or for which the insured may be liable, and the property of others in storage or for repairs." For example, a commission merchant may sell textiles and the manufacturer may deliver to him goods that are not yet sold. The commission merchant may make advances to the manufacturer on such goods, holding the goods as collateral for the loan. They are held by him in trust or on commission. Under the commission clause, in the event of loss, the loss is payable to the commission merchant, who then returns to the real owner the amount due over and above his interest as agent or trustee. Insurance companies have gradually realized that such a form may be given a broader meaning than was intended. The words "in trust" have been construed in their ordinary mercantile meaning and not confined to the legal definition of "trust." The insurance, furthermore, is held to be for the benefit of the owner of the goods as well as for the person procuring the insurance. The form is also not without its dangers to the insured. All the property covered must be included in the computation of the amount of insurance required by the coinsurance clause; unreasonable claims by the property owner may delay the adjustment of the bailee's loss. If the insurance is inadequate to cover the loss, the owners will share the proceeds with the bailee, to the loss of the latter.

A number of forms describe interests of somewhat unusual character, such as the interest of owners or bailees in the "charges" on grain, including storage charges, handling, interest on the money, and loss on hedging, or the interest in the value of labor expended on furs placed in storage, and so forth.

2. Description of the property. A part of the form must necessarily state *what* is insured. It is essential that a form describing the property shall cover all that it is intended to include. It is also necessary to be careful that the descriptive form does not limit a liability that is expected to be assumed entirely. A descriptive form in the ordinary case is intended to cover one or more of the following items: (a) buildings, i.e., real property; (b) machinery; (c) stock (in the case of a manufacturing or mercantile property) or contents (in the case of residences or other noncommercial property). The simplest method would be to use a blanket form covering as one item buildings, machinery, and stock; but inasmuch as the stock rate is usually higher than the other rates and the blanket policy is written at the highest net rate, it is ordinarily cheaper to write specific insurance on each item, or at least on the stock.

The building can usually be described by citation of number, street, and city, with such amplifying or restrictive phrases as are necessary to designate definite structures. The building form usually enumerates as included in the coverage all fixtures such as "engines, boilers, heating apparatus, ventilating apparatus, lighting and electrical apparatus, elevators," and the like.

Machinery may be described as "machines, machinery, tools, implements, apparatus, appliances, furniture, signs, awnings," and the like, but it is necessary to distinguish sharply between the machinery covered under the building item and that covered under the machinery item. The distinction is enforced by a statement that the machinery covered under the building item is not covered under the machinery item. Otherwise it might be difficult to determine which item or policy covered a particular machinery loss and difficulties would arise in adjustment of losses.

The stock may be described by such words as "stock, samples, materials, boxes, cases, labels and supplies, unmanufactured, in process of manufacture, and finished," or in the case of a mercantile risk by "merchandise, samples, materials and supplies." A dwelling form and household furniture form, reproduced in this chapter, give examples of the terms used in this connection.

In all these cases it is advisable to avoid indefinite expressions. "Fixed machinery," "machinery pertaining to the business," "such goods as are usually carried for sale," "contents," and the like are expressions that are very general in character and their meaning is difficult to define accurately. Texas reduces the use of descriptive forms by defining in the printed standard policy "building," "household goods," "stock," "furniture, fixtures and machinery," and "contents."

For the sake of convenience, as well as uniformity, agents and brokers are supplied with printed forms to cover common cases. There are dwelling and household furniture forms, seasonal dwelling forms, apartment house and church forms, mercantile building, mercantile stock, automobile garage, printing plant, school, theatre, warehouse, farm property, and other forms. Reproduced here are a dwelling form and mercantile form, as examples.

The advantages of printed forms are: (a) comprehensiveness—most of the necessary points to be covered are already printed or indicated, including also customary accompanying clauses; (b) convenience—the agent or broker is not forced to invent his own expressions to indicate coverage; (c) uniformity—many sets of forms are substantially similar in wording.

The disadvantages of printed forms are: (a) they may be used automatically for cases in which they are inappropriate; (b) the broker or agent may not appreciate the significance of the expressions used and may include or omit coverage unintentionally; (c) they are somewhat inflexible and therefore not adapted to peculiar circumstances.

Dwelling House Form (Building and Contents)[1]

On the following described property, all only while situate .....

.....

1. $.....On the . roof . . . . building and its additions (if any) communicating and in contact therewith, while occupied only for

[1] On this printed form appear also a lightning clause, vacancy permit, and other clauses discussed previously and not reproduced here.

dwelling house purposes; and on awnings, wall and ceiling decorations, frescoes and permanent fixtures, all while attached to and forming a part of said building, and on lumber and other materials while contained therein and/or on the premises and streets immediately adjacent thereto for use in constructing, altering and/or repairing said building. This insurance shall also cover under this item (if the property of owner of building) awnings, door and window screens and storm doors and windows, belonging to above described building, while stored in outbuildings on the above described premises.

2. $..... On household furniture, family stores and provisions and personal effects of every kind and description, including casts, curiosities, drawings, dies, implements, jewels, medals, models, musical instruments, patterns, pictures, scientific apparatus, sculptures, signs and tools (but excluding accounts, bills, bullion, currency, deeds, evidences of debt or other documents, manuscripts, merchandise kept for sale, held on storage or for repair, motor vehicles of any description, money, notes or securities); all being the property of insured or of any member of insured's household, all only while contained in the above described dwelling house building and its additions (if any) communicating and in contact therewith, and, if not separately insured for a specific amount under this, or any other policy, while stored in outbuildings on above described premises. This insurance shall also cover under this item (if the property of tenant and not otherwise insured) awnings, door and window screens and storm doors and windows, while contained in, or attached to, above described building, or while stored in outbuildings on the above described premises.

3. $..... On the . roof building and its additions (if any) in contact therewith, occupied as a private garage and/or private stable.

Building, Merchandise and Fixtures Form

On the following described property, all only while situate .....

1. $ ... On the . story roof . building and its additions (if any) of like construction communicating and in contact therewith, while occupied only for ... purposes, including foundations, sidewalks, plumbing, electrical wiring and stationary heating and lighting apparatus and fixtures; also all permanent fixtures, awnings, wall and ceiling decorations and frescoes, stationary scales, machinery and elevators, if belonging to and constituting a part of said building.

2. $.....On merchandise of every description, consisting principally of ..... manufactured or in process of manufacture, and on materials for manufacturing same, including packages, labels, cases, boxes and all wrapping and packing materials, all being the property of insured or sold but not removed; all only while contained in, on, or attached to the above described building and its additions (if any) of like construction communicating and in contact therewith, situate as above, and in or on cars and vehicles while within 300 feet of said building, and also while in, on and/or under sidewalks, platforms, alleyways and open space, provided such property be located within 25 feet of said building and be not otherwise specifically insured.

3. $.....On store, office, workshop and business furniture and fixtures and equipment; and on awnings (if not belonging to and constituting

a part of building), casts, curiosities, drawings, dies, implements, jewels, medals, models, patterns (other than machine shop or foundry patterns), pictures, scientific apparatus, sculptures, signs and tools; and on supplies incidental to the business of insured; all only while contained in, or attached to the above described building and its additions (if any) of like construction communicating and in contact therewith, situate as above, and in or on cars and vehicles while within 300 feet of said building, and also while in, on and/or under sidewalks, platforms, alleyways and open space, provided such property be located within 25 feet of said buildings and be not otherwise specifically insured.[3]

Mention should also be made of certain other descriptive forms not connected with particular classes of property.

(a) An "automatic cover" form will protect for 90 days additions to buildings, equipment and contents, and new buildings, equipment and contents on the premises insured, up to 1 per cent of the value of the original property.

(b) A "foundation" form excludes from coverage items that are not likely to be damaged by fire, such as foundations, piling under water, cost of excavations, railroad tracks, pipes, drains, and the like. When a coinsurance clause exists, this form makes it less expensive to comply with its requirements.

(c) An "accounts" form will cover the actual cost of books, binders, card index systems and records, and the labor cost necessary to reproduce the accounts and records.

(d) An "errors and omissions" form protects a mortgagee against the lack of insurance, invalid or insufficient insurance, which would prejudice his interest in the property in question and make the collection of the debt less likely. Trust companies, banks, savings-and-loan associations, and other large lenders have so many properties to look after that by carelessness or oversight property intended to be insured may be accidentally overlooked or a mistake made. This insurance is written on a 20 or 25 per cent coinsurance basis, so that for full protection the insured must carry insurance equal to at least that percentage of his mortgage loans. This form contributes to pay losses only to the extent that other insurance is lacking, and is therefore a form of excess insurance. Two types of errors and omissions coverage are written: (1) a form that agrees to pay only to the extent that the fire damage impairs the mortgagee's interest, which means that the loss must exceed the owner's equity in the property before the mortgagee can recover; (2) a form that agrees to pay the amount of any loss less the amount due under other valid insurance. The latter is broader and naturally more expensive.

3. Location of the property. It is also necessary to state clearly the location of the property, inasmuch as the policy covers only while the property is in the location described. A portion of the form therefore describes *where* the property is insured. Usually the street address, county, city, and state are sufficient. In rural districts, however, pains must be taken to describe the location so as to identify the property

[3] Here follow certain permits and warranties discussed in the chapter on *Clauses.*

easily. For instance: "West side of road leading from Florida School House to R.R. Station in Florida District, 100 ft. north of memorial statue, Ridgefield, Conn." A common description is: property "contained in and on buildings, additions, and extensions situated at" a given location. This expression is sometimes extended to read also, "about the buildings, additions and extensions," which greatly extends the scope of the coverage. In one case it was held that a building unconnected with the main building was an "extension" thereof. Policies covering household furniture frequently include the property of guests while in the house. If the latter is of considerable value it may happen that the insurance taken will not reach the required percentage of the value, in which case the owner of the furniture becomes subject to the provisions of the coinsurance clause referred to later. In describing the location, there is the same objection to the use of loose and inaccurate expressions such as "premises," "adjoining," "communicating," the meaning of which may be called in question after the loss occurs.

Classification of descriptive forms. According to the nature of the form, policies naturally classify themselves in several groups. Before discussing these classifications, however, we must consider a dichotomous grouping which has no connection with forms, but is necessary for later discussion. This classification depends upon the liability for payment of losses:

(1) An "excess loss" policy is one whose liability begins only when other insurance has been exhausted. It is responsible for the payment of the excess of the loss over the indemnity provided by one or more other policies. The errors and omissions form, previously referred to, is one example of this type of policy, and other examples discussed later are the excess floater and some general cover contracts.

(2) A "contributing" policy is one whose liability begins with the first dollar of loss, and its name arises from the fact that if other insurance exists this policy must contribute pro rata with other policies to the payment of any loss, however small. This is the common type of policy.

The types of policies, as determined by the form attached, are classified here as to: manner of coverage, location of property, face value of policy.

1. Manner of coverage. With respect to manner of coverage there are (a) "specific" policies, (b) "schedule" policies, and (c) "blanket" policies. A specific form is one in which a definite amount of insurance applies to each single item or kind of property insured. Insurance of $10,000 on stock is a specific form, but insurance of $30,000 on "building and stock" is not.

A schedule form lists several items or kinds of property and specifies the amount of insurance applying to each, so that it is in reality merely a particular species of specific policy. In the building, merchandise, and fixtures form reproduced in this chapter, for example, it will be noticed that separate spaces are provided for the respective amounts of insurance on building, on stock, and on furniture and fixtures.

A blanket policy is one covering by a single amount of insurance two or more buildings at different locations, two or more collections of stock

at different locations, or two or more kinds of property at the same location. Insurance of a building and its contents together for $40,000 would constitute a blanket form, as would insurance of a warehouse in Philadelphia and one in New York for $500,000, or of stock and machinery for $30,000, or of cardboard boxes at two locations for $20,000.

The rules of rating bureaus and underwriters' associations set up individual definitions of a technically specific policy in their individual jurisdictions, e.g., by permitting signs and awnings to be considered part of the building item, by allowing stock and machinery to be covered as a single item, by permitting clothing and jewels to be included with household furniture, and so forth.

It is simple to lump all items together in a blanket form, and avoid the necessity of computing separate values, but if one of the combined items takes a higher rate, as is the case with building and stock, and perhaps with two different buildings, the cost is thereby increased. In the case of stock insured at two or more locations, a blanket form will give leeway for variations in values at the two locations, if not restricted by coinsurance and pro rata clauses. Frequently, however, 90 per cent insurance to value is required on blanket policies, as contrasted with 80 per cent on specific forms.

In insurance of stock, a blanket form permits one policy to cover stock contained in more than one location, the values of which are subject to variation. A 90 per cent coinsurance clause does not prevent such coverage, but does prevent the insured from accomplishing it by merely carrying one blanket policy equal to the largest probable value in any *one* location. In the absence of any coinsurance requirement, an insured with stocks of goods at two locations aggregating $10,000 might estimate that the most unequal division likely is $6,000 at location *A* and $4,000 at location *B*. He could then protect the entire stock with little probability of loss to him by taking out a blanket policy for $6,000 covering both locations. It would be very unlikely that two fires would occur at two different locations at the same time.

If 90 per cent of insurance to total value is required, however, he would have to take at least $9,000 insurance or risk the possible consequences described later. Rating organizations promulgate blanket average rates for cases in which they consider blanket forms justifiable.

If two buildings are involved, and the need for blanket insurance is less apparent, a pro rata distribution clause is usually added to the policy. This limits the company's liability at any one location to that proportion of the face of the policy which the value at that location bears to the total value at all locations insured. If Building *A* (worth $100,000) and Building *B* (worth $150,000) were insured under a blanket policy for $150,000, with pro rata distribution clause attached, the insurance carrier's maximum liability on Building *A* would be 100/250 of $150,000 or $60,000. Its maximum liability on Building *B* would be 150/250 of $150,000 or $90,000.

It might be stated incidentally that the blanket form is also variously known as "general" or "compound" insurance, and in loss adjustment dis-

cussions the designation "general" is applied to any policy covering more items than another policy involved in the same adjustment.

2. Location. With respect to location there are (a) "named location" forms and (b) "floating" forms. For instance, a form covering goods while contained in a building "situated at 200 East Street" is a named location form. Most policies are of this type.

Some property, however, must through necessity be moved about, and forms to cover such property wherever it may be are therefore required. Such forms make the policy a floating policy. For example, a tourist form covers the clothing and personal property of travelers anywhere in the United States, Mexico, and Canada, and while being transported. This form is frequently written on individual articles of personal property carried about by artists, actors, musicians, exhibitors, and the like. The inland marine form, described later, covers enumerated perils in addition to fire and therefore is broader than the fire form.

Another form of floater is an excess loss policy (not frequently used), which is intended to cover goods of the insured while on the premises of other persons, such as goods in warehouses and in possession of processing contractors. The rates for this are high and its purposes are usually better served by the "general cover" described later. The insured's main location is excluded from coverage in the same policy. Other properties for which floaters may be required are rolling stock of railroads, automobiles, cotton in shipment, grain from field to warehouse, threshing outfits, and so forth.

The blanket policy on goods in several locations, in which the goods move about, is very similar to the floater, but it seems best to confine the term "floater" to forms that cover in locations unspecified and unknown when the policy is written.

3. Face value. With respect to face value, forms may be classified as (a) "fixed face value" and (b) "open" policies. In a policy of fixed face value, an amount is named in the policy which is the ultimate limit of company liability (in the absence of more narrow restrictions). Beyond this amount a company is never liable. The face value also furnishes the basis upon which the insured pays premiums, the premium being obtained by application of the rate to the face value. A policy for $10,000 on a $50,000 stock, at a rate of $.85 per hundred, will cost the insured $85 a year.

The insured should not assume that he is covered to the extent of the face value ($10,000) without looking for other restrictions in the policy. It is likely that a coinsurance clause on this policy would provide that the insured can not recover more than $10,000/(.80 $\times$ $50,000) or one fourth of any loss. On a loss of $4,000 the insured would recover only $1,000 because he took too little insurance. But on a loss of $44,000 one fourth of the loss would be $11,000; nevertheless the insured's recovery would be restricted to $10,000 by that ultimate limit, the face value.

The most important form of open contract is the "general cover," also known as a "reporting" form, "multiple location" form, and "automatic coverage." As corporations have increased in size and it has become

common for one financial interest to own stocks of goods at numerous locations, frequently situated in different cities, with the value at the various locations continuously changing, the need has arisen for an adequate and uniform method of insuring under such conditions. General cover contracts are the answer.

For example, a retail store corporation of the "chain" type may have half a dozen warehouses and 150 individual stores, all located at different places in the United States. The value of goods in any one of these warehouses or stores may be as little as $100,000 in one month and as much as $500,000 in another month. If these goods are to be covered by specific insurance, either the insured must insure at least $500,000 in each location, in order to be sure of collecting any loss in full, in which case he pays premiums for insurance he can never collect, or he must attempt to estimate closely in advance the required insurance, and he may find the amount insufficient to cover a loss completely.

The remedy is a contract that has no fixed face value, the face value adjusting itself to the changing value at each location. It can be readily seen that this type of coverage is adapted to department stores, five-and-ten-cent stores, retail drug and clothing stores, food stores, manufacturing concerns with numerous factory warehouses and distributing warehouses, lumber mills, filling stations, and numerous other risks of similar character.

General cover contracts. Under the "general cover" contract, one policy covers goods in all locations, the policy really having no fixed face value, and new locations can be automatically insured simply by a report of them to the insurance company. The insured *estimates* the maximum amount of insurance that can ever be required at each given location, and a limit of insurance conservatively in excess of this estimate is established for each location. These limits individually determine the company's liability at each location and collectively determine its total liability. The insured agrees to report to the company each month the value at each location, including new locations acquired, and the company agrees to pay any losses incurred on the values reported at any of these locations.

The insured deposits a provisional premium in advance, but the actual premium paid will depend upon the average of the values reported each month. One nonreporting form will be referred to later. These policies are all excess loss contracts if the insured carries any fixed face value, or specific, policies for any location.

The advantages to the insured of this form of coverage are: (a) that he is neither underinsured nor overinsured at any time, the premium being based on the monthly values reported; (b) that he avoids cancellations that would otherwise be necessary to keep insurance adjusted to value at each location, and for which cancellations he would be charged the expensive short rate; (c) that he is saved the trouble of watching his insurance and the danger of being underinsured in spite of his care, through oversight or mistake; and (d) that the rate is adjusted to 100 per cent insurance, whereas specific policies requiring insurance only to

80 per cent of the value give no reduction for amounts of insurance above this figure.

The following forms of general cover contracts are in general use:

1. I U B #1. This is a form issued under the jurisdiction of the Interstate Underwriters Board, an association that controls the forms, rules, and rates under which this and the following two forms are written. It is applicable only to risks involving five or more locations in two or more states and requires payment of a certain minimum premium, say $300 per account. Stocks, furniture and fixtures, patterns and dies, and certain machinery, when located in mercantile establishments, warehouses, or in manufacturing establishments not owned by the insured, may be covered by this form.

The rate is a weighted average of the rates at the five or more locations and is applied to the average of the values reported for insurance in the monthly reports rendered by the insured.

If the risks are all located in one state, the insurance may be written under a form known as "Single State Form A," which is substantially similar in character but does not require handling by an interstate association. This latter form requires only two or more locations and a smaller minimum premium, say $100 per policy. Insurance companies arrive at the premium not by applying an average rate to the total insurance, but by applying each specific rate to its respective location and combining the results.

It is evident that under general cover contracts a wide variety of risks are eligible and that not only stock but other items may be insured, the I U B form supplying a coverage for large corporations doing an interstate business and the Single State Form A taking care of smaller risks. Since premiums are computed from average monthly values, these two forms are suitable for risks that do not vary much within a period of one month.

2. I U B #2. This is a form designed to cover risks whose values vary considerably within short periods, so that an average of monthly values might be inequitable. The insured therefore reports each month, not the value as of a given date but the average of the weekly values during the monthly period. This form is usually necessary only for manufacturing concerns of a seasonal character, and stock only is eligible for insurance under it. Other property is taken care of by supplementary specific policies. The same minimum premium is required as for #1 form. If the risks are located in the same state, Single State Form B may be used, which is substantially the same in character, but requires only two locations and a $100 minimum premium as contrasted with $300 for the I U B form. Premiums are computed for forms #2 and B as for #1 and A, respectively.

3. I U B #5. This form will insure the same property as that described for I U B #1, but it is not a reporting form and has no provisional amounts of insurance. The insured is required to maintain insurance of 90 or 100 per cent of the value of the property, or suffer a reduction in the amount recoverable on any loss. The insurance company's liability

is limited to a certain maximum at each location; but since the policy is a blanket form, the insured need only have 90 or 100 per cent of the *total* value covered. It is suitable for risks in which the total value of property is known, but the exact value at each location cannot be kept track of. New locations are automatically taken care of to the extent specified in the policy. The #5 form is superior to the ordinary blanket stock form because of this automatic coverage of new locations and because the ordinary blanket form usually makes no allowance in the rate for percentages of insurance taken exceeding 80 per cent of the value.

4. Single location forms. In a few jurisdictions a reporting form similar to the above types is available for one location. The necessary auditing and other expense militates against the widespread use of such contracts.

5. Interstate class floater. This is in reality a blanket policy similar in character to I U B #5 with no minimum premium requirement, written at average rates furnished by the I U B. No monthly reports are made. It is a 90 or 100 per cent coinsurance form. It requires five or more locations and has automatic coverage of new locations but with small limits of liability at individual locations. The insured's main location is not covered in this policy.

Other specialized reporting forms similar in character to those described apply to oil companies, tobacco warehouses, cotton compresses, grain in elevators, storage tanks, and the like.

Forms extending the scope of the coverage. The standard fire policy provides protection against all *direct* loss or damage by *fire,* but:

(1) Certain perils other than fire have come to be considered as subsidiary to the fire insurance contract and are assumed by fire insurance companies either (a) by the addition of forms to the fire contract or (b) by collateral policies.

(2) In many cases the fire inflicts as much damage on the insured by reason of the results following the fire as by the destruction of physical property during the fire, and these consequential losses must be covered either by endorsement or separate policies.

The remaining forms to be discussed are divided into these two groups, i.e., (a) forms covering additional perils other than fire, and (b) forms covering consequential losses, although for convenience several types of insurance that are usually written by collateral policies instead of endorsements have been included.

The standard contract of New York gives permission to attach to it forms extending the scope of the policy:

38 **Other perils**
39 **or subjects.**
40
41 added hereto.

Any other peril to be insured against or subject of insurance to be covered in this policy shall be by endorsement in writing hereon or

Perils other than fire. *1. Earthquake.* An endorsement or separate policy may be obtained which will protect the insured against damage to

property caused by earthquake or volcanic eruptions. Whereas the standard policy is voided by the fall of a material part of the building, the earthquake policy also covers fire damage immediately following an earthquake. It does not cover damage caused by tidal wave, high water, or overflow.

In the Eastern states earthquake is usually covered by a separate policy, on which at least a 50 per cent coinsurance clause is required. This policy contains the fire damage provision referred to above. It also promises to pay any loss, however small. In Pacific Coast territory the protection is usually afforded by an endorsement on the fire policy, an endorsement which differs in some respects from the Eastern policy. Since the endorsement does not contain the fire damage clause, it is necessary also to attach to the fire policy, if required, a waiver of its fallen building provision. The Pacific Coast endorsement also contains a 5 per cent deductible provision, which stipulates that the insured can not recover losses that individually are less than 5 per cent of the face of the policy. This provision reduces the protection, but at the same time makes the insurance less expensive, for the insured himself bears small losses. Since earthquakes frequently include a series of shocks, all tremors occurring within 72 hours are considered as one earthquake, and resulting damages may be combined in determining the application of the deductible provision.

Companies determine rates principally by (a) establishing zones of territory, according to frequency of earthquake occurrences, and (b) classifying risks in six groups according to the ground upon which constructed and the type of construction.

Earthquake is not one of the perils covered by the Extended Coverage Endorsement referred to later.

2. Windstorm and hail. Protection against these perils may be obtained by either an endorsement or a separate policy. Windstorm and hail are also included in the group covered by the Extended Coverage Endorsement. The insured is protected against damage to property caused by windstorm, cyclone, or tornado. The two latter are fully covered by the term windstorm. In some states damage done by hail must be included in the coverage and in other states it may be included by endorsement.

Three principal forms of coverage are written, usually known as (a) the Eastern form, (b) the General form, and (c) the Texas form. All three cover the same perils. They do not include damage by snowstorm, blizzard, frost, cold weather, cloudburst, theft, water, or rain. Water damage directly resulting from damage to roof or walls by wind is covered. All forms exclude from coverage metal smokestacks, awnings, signs, and similar property appendages, on the ground that the extent of their potential damage is largely within the control of the insured.

The Eastern form differs from the General form in that (a) it excludes a more extensive list of forms of property, (b) it does not cover glass insured under glass insurance policies (whereas the General form is contributory in this respect), and (c) it contains a fallen building clause,

which provides that insurance ceases unless the fall is the result of wind.

All forms contain a pro rata provision respecting plate glass, stipulating that the recovery on each pane is limited to that proportion of the value of the pane that the value of the plate glass in the building bears to the total value of the building. This provision compensates for the extreme damageability of the glass as compared with other property.

Blanket forms of policies are written for the protection of mortgagees, and a clause may be attached covering the expense of removing debris after a windstorm.

Rates depend principally upon (a) the state and county in which the risk is located, for maps are available showing dangerous districts, (b) whether the building is wind-resistive or of ordinary construction, (c) the type of use, and (d) increasing credits for coinsurance clauses ranging from 50 to 90 per cent of the value of the property.

3. Riot and civil commotion. Insurance may be secured covering damage to property from riot, riot attending a strike, insurrection, and civil commotion. Such protection is afforded by the Extended Coverage Endorsement or by a separate policy, and the latter supplies in addition an explosion coverage. This protection is especially useful in businesses in which strikes are common and for properties of a type likely to be looted by rioters, such as food and clothing stores, jewelry stores, banks, and the like.

The riot policy protects the property against that peril which is specifically excluded by the fire policy, against pillage and looting occurring at the immediate scene of the riot, and against damage done by striking employees while occupying the plant (sit-down strike). Only direct physical damage to property is covered and not consequential loss, unless the latter liability is specifically assumed. Losses that are due to delay, deterioration, loss of market, and internal explosion of automobiles and aircraft are not covered.

A riot is defined in many states by statute and in a few by common law. For present purposes it may be considered as a tumultuous disturbance of the peace by three or more persons assembled and acting with a common intent. Of course, damage may be done by less than three persons and by quiet, stealthy, but harmful acts, but these latter are designated in insurance parlance as vandalism and malicious mischief. If vandalism and malicious mischief are to be covered, separate endorsement is required.

The rates vary from $.05 to $1.50 per hundred, approximately, and depend upon three factors: (a) the construction of the building (whether fireproof, brick, or other); (b) the class of occupancy (there being nine groups according to type of business); and (c) the type of coinsurance clause used. Basic rates assume a 50 per cent coinsurance clause, with reductions for an 80 and 100 per cent clause and penalties for the use of lower percentages. If the insurance is applied for at the time of an impending riot or disturbance, or after one has occurred in the locality, the rate is trebled, if the insurance is granted at all.

Inasmuch as the events covered are susceptible to some degree of prevision, it is provided that the contract cannot be canceled during the first 90 days of the term but can be canceled thereafter by either party upon notice.

4. Explosion. Explosion insurance may be obtained by (a) endorsement on the fire policy, (b) the Extended Coverage Endorsement on the fire policy, (c) explosion coverage included in the riot policy, and (d) the simple explosion policy. Dwelling and household furniture forms, filling station forms, grain forms, and other special forms may contain an "inherent explosion clause," which covers losses by explosions originating from causes within the insured building. The Extended Coverage Endorsement covers both inherent explosion and explosions originating outside the building, and the same is true of the riot and simple explosion policies.

In all cases of explosion insurance, damage from explosions of boilers and engines is excluded from coverage, these being left to the steam boiler and machinery insurance policies. Inherent explosions of automobiles and aircraft are also excluded. The conditions of the policy are substantially the same as those of the fire contract, with the addition of the pro rata clause affecting plate glass. Unless specifically assumed, no liability for consequential loss is involved nor for the other exclusions previously mentioned under riot insurance.

The rates are principally dependent upon (a) the class of occupancy, and (b) the coinsurance clause used. The 50 per cent clause is the basis, and credits are given and charges added for larger and smaller percentages of coinsurance.

5. Malicious mischief. Insurance against malicious mischief and vandalism protects against damage done to property by acts not of a nature to constitute a riot or by persons insufficient in number for a riot. It is written in conjunction with riot insurance and the Extended Coverage Endorsement, because malicious mischief is not covered by these or other forms of collateral insurance. Liability for small losses is usually excluded by a deductible provision exempting the company from liability for losses of less than a specified amount, say $100. There is no liability under this form for glass damage, fire, explosion, pilferage, theft, burglary, larceny, depreciation, delay, deterioration, loss of market, consequential loss, enemy attack, or any peril insured under another contract.

6. Aircraft and motor vehicle damage. This protection covers damage to property of the insured by aerial craft or objects falling therefrom, and damage by automobiles or other motor vehicles. It does not cover damage to property outside of building walls, damage by aircraft given permission to land by the insured, damage to motor vehicles or aircraft owned or operated by the insured unless the latter are in flight, or damage to automobiles. There is also a pro rata clause applying to plate glass. This insurance is supplied either by separate policy or by the Extended Coverage Endorsement.

Rates depend upon the classification of the property and the percentage coinsurance clause used. Under this form such things as farmers' crops and race horses have been insured.

7. Smoke and smudge. The standard New York policy does not cover damage from friendly fire. If a fire remains in the oil burner, but because of faulty operation of the burner, smoke or smudge damages property, such damage is not within the realm of the contract. This extended provision covers such damage and has become especially attractive since the development of oil as a home fuel. This insurance is part of the Extended Coverage Endorsement and is also written by separate endorsement. It covers damage from smoke arising from a sudden, unusual, and faulty operation of any stationary steam, hot water, or hot air plant pertaining solely to the service of the building, but not smoke from stoves, fireplaces, or industrial apparatus. A somewhat broader form also covers such damage arising from kitchen stoves, but in many states this form is not permitted. The premium for this coverage is nominal.

8. Extended Coverage Endorsement. As it became common to cover other perils than fire by endorsement attached to the fire policy, certain popular coverages came to be grouped in one form for attachment to dwellings and contents policies. This form became known as the Extended Coverage Endorsement or Supplemental Contract, and in 1935 its use was extended to all lines of business. In 1937 it was reduced to a form that may almost be called uniform, for it is used everywhere except in the Southeast and on the Pacific Coast.

This endorsement covers seven of the hazards previously discussed, namely, windstorm, hail, riot and civil commotion, explosion, aircraft and motor vehicle damage, and smoke. Since the protection under each of these perils has already been discussed above, it is not necessary to refer individually to them here. The coverage of the Extended Coverage Endorsement may be extended, of course, by the addition of still other supplementary endorsements, such as malicious mischief and the like.

It is important to notice that the Extended Coverage Endorsement does not increase the number of dollars of insurance coverage, but merely extends the list of perils protected against. If, under a $1,000 fire insurance contract carrying the endorsement, there should be an explosion damage of $700 immediately followed by a fire damage of $600, the limit of recovery would still be $1,000.

Like the riot and civil commotion policy, this endorsement does not cover the war risk, that is damage caused by war, insurrection, rebellion, or warlike operations (whether in a declared or undeclared war), or the acts of foreign agents. Explosions not occurring in connection with military operations are covered. Fires and explosions set by foreign agents are covered.

The rates for Extended Coverage are low by reason of several factors. Overhead expense is reduced by the combination of perils and the wider distribution of insurance. The total limit of insurance is not increased,

as shown above. In the payment of losses, all fire insurance contracts on the same property, whether containing the Extended Coverage or not, are considered as contributory. A pro rata glass provision is included, and on glass losses there is contribution by glass policies.

In the Southeast, rental value is also covered by the Extended Coverage Endorsement, and on the Pacific Coast, results following the fall of an insured building are not covered unless there is attached to the fire contract a waiver of the fallen building provision. It might be pointed out that the Extended Coverage Endorsement is a step in the direction of the "all-risk" policy covering all types of perils, which has been earnestly desired by many insureds.

9. Insolvency binder. Under this endorsement, if any stock company carrying specific fire insurance on the insured's mortgage interest becomes insolvent and is placed in the hands of a receiver or conservator, the insured will be reimbursed for the loss sustained by the impairment of his mortgage interest during the 30 days following the court order. This binder is issued in connection with an errors and omissions endorsement.

10. Fire department service. This is an endorsement by which, for an additional premium, the insured may recover for charges made by a fire department for services rendered to reduce possibilities of loss to the insured's property when the property is outside the territory normally serviced by the governmental unit.

Forms covering consequential losses. Since the standard fire insurance contract covers only *direct* damage by fire, endorsements are necessary to protect the insured from the *consequences* of fire and other damage to physical property. Use and occupancy insurance, contingent use and occupancy insurance, rent and rental value insurance, leasehold insurance, and profits insurance have become important auxiliary coverages in the field of property insurance. These are important enough for separate discussion in detail and are therefore taken up in the next chapter.

Summary

I. Purposes of endorsements
   A. To fill in essential missing parts of the contract.
   B. To adapt the contract to circumstances.
II. Classification of endorsements
   A. Forms add to the standard contract.
   B. Clauses modify the terms of the contract.
III. Classification of forms
   A. Descriptive forms
      1. Ownership
      2. Description of the property covered
         a. For different classes of property
         b. For improvements of property
         c. Other descriptive forms
            (1) Automatic cover
            (2) Foundation form
            (3) Accounts form
            (4) Errors and omissions form

3. Location of the property covered
4. Classification of descriptive forms
   a. Excess loss and contributing policies
   b. Specific policies, schedule policies, and blanket policies
   c. Named location and floating policies
   d. Fixed face value and open contracts
      (1) General cover contracts

B. Forms extending the scope of the coverage
1. Perils other than fire
   a. Earthquake
   b. Windstorm and hail
   c. Riot and civil commotion
   d. Explosion
   e. Malicious mischief
   f. Aircraft and motor vehicle damage
   g. Smoke and smudge
   h. Extended coverage
   i. Insolvency binder
   j. Fire department service
2. Consequential losses (treated in the following chapter)

Readings

Medlicott, W. B., "Fire Insurance Policy Forms and Clauses." *Lectures on Fire Insurance,* Boston: Insurance Library Association, 1912.

Barbour, R. P., *Agent's Key to Fire Insurance.* Philadelphia: Spectator Co., 1939.

The Weekly Underwriter, *The Underwriter's Book of Forms.* New York: Underwriter Publishing Co., various dates.

Smith, C. M., "The Form Attached to the Policy." *Institute of Fire Insurance,* Pittsburgh: American Mutual Alliance, 1940.

Harrington, Geo., "Use of Forms and Clauses." Insurance Society of New York, December 9, 1932.

Royal-Liverpool Groups, "General Cover Contracts." New York, 1939.

Howe, W. C., "Principles of Fire Insurance." *Weekly Underwriter,* July 27, 1940.

Stock, Thompson, *Applied Fire Insurance.* Detroit: Stock Publishing Co., 1939, Chaps. 4, 6, 8, 10, 21, 22, 23, 24.

O'Connor, J. C., "Tornado and Extended Coverage." *Institute of Fire Insurance,* Pittsburgh: American Mutual Alliance, 1940.

Kelly, A. B., "Collateral Lines in Fire Insurance." *Institute of Fire Insurance,* Pittsburgh: American Mutual Alliance, 1940.

Kline, Chester, *Windstorm Insurance.* Philadelphia: privately printed, 1932.

Freeman, J. R., *Earthquake Damage and Earthquake Insurance.* New York: McGraw-Hill Book Co., 1932.

Magee, J. H., *Property Insurance.* Chicago: R. D. Irwin, 1941, Chap. IX.

Problems

1. What is the difference between a "form" and a "clause"? Is the use and occupancy endorsement a form or a clause?

2. What is the relation between forms describing ownership and the provisions of the fire policy?

3. Company *A* sells an incubator outfit to *X* for $4,000 on the installment plan, to be paid for at the rate of 5 per cent a month, *X* giving the company

20 promissory notes. *A* discounts the notes at a bank for $3,900. How should *A*'s interest, if any, be protected in a fire insurance policy?

4. *X* leaves his overcoat at a tailor's shop for repair, and the tailoring establishment and all its contents are totally destroyed. *X* wants to know if there is any possibility of his recovering the value of the coat, the tailor being insured.

5. The Braden Company, a partnership consisting of Braden, George, and Homan, insures the partnership property against fire. George withdraws from the partnership, and Frank becomes a partner in his place. What should be done, if anything, with respect to the insurance policy?

6. Williams has a warehouse where he stores his own goods, now worth $10,000. He has a policy for $9,000 covering them and also has endorsed thereon a commission form. He also stores goods in the warehouse for others. His policy requires that insurance equal 80 per cent of the property value, or losses will be paid proportionately. At the time of the fire he was storing $5,000 of goods for others, and the loss on all goods was $3,000. What effect has the commission clause on what Williams can collect?

7. Is there any objection to a form's covering "on a store on 15th Street, occupied as a retail drygoods establishment, and such contents as pertain to this business?"

8. How is it possible to insure property that has no fixed location?

9. *X* has $8,000 of goods at location *A*, $10,000 at location *B*, and $2,000 at location *C*. Show how an excess floating policy would supplement specific policies at these locations.

10. The *X* Company has lent $200,000 on mortgages. It obtains an errors and omissions policy for $30,000. A property worth $20,000, mortgaged to it for $15,000, is damaged to the extent of $10,000, and is found not to be covered by the ordinary fire policy. What can the mortgagee recover under each form of errors and omissions insurance?

11. Explain why blanket forms are not more generally used.

12. For what situation is a general cover or reporting form suitable? A floating form?

13. Covering a $5,000 property, *B* has a fire policy for $2,000, on which there is an extended coverage endorsement covering earthquake, windstorm, riot, civil commotion, and so forth. There is damage of $800 because of windstorm, followed immediately by $1,300 damage because of fire. How much can *B* recover?

14. Peal has four sporting goods stores in four Pennsylvania cities. He rents the stores but owns the stocks of goods. His sales during June, July, August and September are double those of any other four-month period of the year. His business is expanding rapidly, and his stock is now worth, in total, $200,000, on which the average fire insurance rate would be about 40 cents per $100. The stocks in the different stores vary from a value of $20,000 to $70,000 during the year. What form of fire policy would be suitable for this situation?

15. Holl had an automobile service station. Three men who were being served in front of the station engaged in an altercation, and one retreated into the service station building. The other two followed him into the building, and in the fight which ensued $300 damage was done to furniture, fixtures, and goods. What form of protection would have covered this loss?

16. Suppose in Problem 10 the $20,000 property had been covered by a $5,000 specific fire insurance policy. What can the mortgagee recover from each form of errors and omissions insurance?

CHAPTER 21

Insuring Consequential Losses

Consequential Losses

The standard fire contract is an agreement to repay the insured for direct loss. It is apparent, however, that the consequences of a direct loss may be greater than the direct damage itself. If a manufacturing plant cannot operate because a fire cripples its machinery or if an explosion destroys the refrigeration facilities of a meat packing plant, it loses profits during the period of inactivity that it would ordinarily have earned. If a fire makes half of a building untenantable for six months (during the period of repair), the owner will lose rents during that period. The attachment of a consequential loss form, although it does not make the policy cover different perils, gives the insured a different type of payment under his policy. It provides payment, as a result of the same perils, for a different type of financial loss.

Forms of consequential loss. The preceding chapter having been devoted to forms attached to fire policies for the purpose of extending the scope of the protection afforded, this chapter will take up forms attached for the purpose of covering consequential losses. The following outline serves to illustrate the scope of such types of coverage:

Risk	*Form of Protection*
As a consequence of direct damage to property:	
A. Loss of future earnings and continuing expenses	Use and Occupancy Insurance
B. Additional expenses necessary to continue operation	Extra Expense Insurance
C. Loss of future profits or commissions on finished goods	Profits and Commissions Insurance
D. Loss of leasehold value	Leasehold Insurance
E. Loss of future rents or rental value	Rent Insurance
F. Consequential damage to other property	Consequential Damage Insurance
G. Inability to collect accounts receivable	Accounts Receivable Insurance
H. Loss of unexpired premiums	Unearned Premium Insurance
I. Demolition or extra replacement costs	Demolition Insurance

Use and occupancy insurance—its purpose. It has been seen that fire insurance indemnifies only for the direct loss from the peril insured

against, and that the same is true of tornado, windstorm, explosion, sprinkler leakage, riot, earthquake, and other direct property damage policies. The indirect or consequential loss that results from business interruption following the fire (or other event) may easily exceed the direct loss, because inability to operate during the period of repairs may result in lost income that could have been earned and continuance of expenses that cannot be cut off. Direct property damage policies are therefore supplemented by a form of business interruption insurance called "use and occupancy" insurance.

Basis of insurable value. Visualize the situation of a prospective buyer of this protection by considering the following table of his accounts for the previous 12 months:

			Annual	*Per Day*
Net receipts from production (sales)			$720,000	
	Noncontinuing	*Continuing*		
Expenses:				
Raw material	$200,000			
Salaries	10,000	$40,000		
Taxes		10,000		
Labor	420,000			
Royalties		15,000		
Interest		10,000		
	$630,000	$75,000	$705,000	
Net Profit (+) or loss (−)			+15,000	+50
Continuing Expenses (as above)			75,000	250
Estimated insurable value			$90,000	$300

Amount of insurance. From the foregoing table it will be seen that the manufacturer's probable loss, if he were entirely prevented from operating for a period of a year, would be the $15,000 profit and the continuing expenses of $75,000, or a total of $90,000.[1] This amount is sometimes called the "insurable value"; but the manufacturer may make his decision as to the amount of insurance he desires to carry, subject to coinsurance provisions to be discussed later. In fact, his conclusion cannot be other than an estimate, with allowance made for possible future increase or decrease in operations. The premium paid is calculated on the amount of insurance carried.

If the insured wishes, he may also insure his ordinary payroll, as a

[1] This calculation always gives the insurable value provided profit is considered as positive (+) and loss as negative (−). Sometimes the computation is given as net receipts minus noncontinuing expenses, because if R = net receipts, NE = noncontinuing expenses, CE = continuing expenses, and P = profit (or loss)

$$R - NE - CE = P$$
$$R - NE = P + CE$$

and either side of the equation may be used, for they are equivalent.

second item, for some part of this is likely to continue in the event of short interruptions. If he desires to do so, the amount of insurance required is the total ordinary payroll for 90 days. Thus his insurance covers:

Item I. $..... on (a) the net profit that is prevented from being earned and (b) such charges and other expenses as must necessarily continue during a total or partial suspension of business to the extent that such charges and expenses would have been earned had no fire occurred.

Item II. $ ..... on the insured's entire ordinary payroll for a period of time not in excess of 90 consecutive days, which may continue during a total or partial suspension of business, but only to the extent necessary to resume normal business, and which would have been earned had no fire occurred.

Term of the contract. The event that damages the property must occur within the term for which the insurance is written. If it does, the insured will be paid for the entire time required to repair or replace the property, not exceeding one year, even though the period of interruption extends beyond the term of the policy. For instance, an insured might recover for a period of 90 days' interruption, even though the fire occurred one day before the expiration date of the policy. The insured might also recover for the effects of several fires in one year, if the face of the policy were large enough to cover them all.

Losses. The interruption occasioned by the fire or other event covered by the policy may result in a period of total interruption or partial interruption, or both. As a result of the fire, for instance, the plant may be totally shut down for a period of 30 days, and for another 30 days be able to do only a fraction of the business otherwise possible. Such total and partial interruptions are both covered, within the limits of the policy.

The profit that would have been earned during the 30 days of shutdown is estimated, say, at a figure of $1,333.33. To this is added an estimate of the expenses that must necessarily continue, aggregating $6,666.67, the total amounting to $8,000. For another 30 days the same profit and expenses continue, but the plant is able to operate enough to earn $6,000, or at ¾ capacity, and the loss is therefore $2,000. The insured's total loss of profit and expenses, therefore, is $10,000.

The insured's recovery for losses is limited by the following factors:

1. Actual loss sustained. The principle of indemnity requires that the insured shall not recover more than the loss actually sustained. Thus, although the statement previously set up shows $90,000 profit and continuing expense in the past, if the loss occurs when the annual rate is but $60,000, this latter is the basis upon which the insured recovers. Since the $60,000 is purely an estimated figure, it may easily lead to a difference of opinion between adjuster and insured. It will be seen, accordingly, that neither the past earnings and expenses nor the estimated future earnings and expenses control the loss payment, but rather the actual loss as nearly as it can be determined.

2. Time required for restoration. The company's liability is limited to the time required to repair or replace the damaged property with the exercise of due diligence. The insured is required to resume operations as soon as possible. If stock is covered by this form of insurance, the time necessary for resumption of operations to the point of getting raw stock into process is likely to be extended, and a higher premium is required. If the insured makes expenditures for the purpose of facilitating resumption of business, the insurance covers such expenditures to the extent that they are effective in reducing the loss. This is an unsatisfactory provision, for the insured takes all the risk of the inefficacy of the expenditures. For years in marine insurance, general average and particular average expenditures, whether effective or ineffective, have been reimbursed, if made in good faith.

3. Face of the policy. As in many other forms of insurance, the face value of the policy indicates the maximum liability of the company. The excess of any loss over the face of the policy must be charged to the insured's failure to carry sufficient protection.

4. Coinsurance provisions. One form of use and occupancy insurance contract, the coinsurance form, requires that the face of the policy represent at least a certain per cent of the actual profit and all expenses other than ordinary payroll and non-continuing light, heat and power, under penalty of a pro rata reduction of the amount recoverable. Otherwise an insured could estimate that not much time would be required to repair or replace the damage, and carry only enough insurance for, say, a 30-day period. If a minimum were not required, rates would have to be considerably increased. This principle is illustrated by Item II in the coinsurance form, which is usually about 25 per cent higher in cost than Item I because it requires insurance of the ordinary payroll for 90 days only. This principle was fully discussed in the chapter on *Clauses,* but its application here is illustrated below.

Other than manufacturing risks. In addition to manufacturing enterprises, use and occupancy insurance may be applied to mercantile, mining, and educational operations, with such modifications in wording as are necessary to adapt the forms to these purposes. The forms used in insuring mercantile establishments may cover finished stock, for this stock is what such an establishment derives its profit from. Forms covering the tuition fees of schools or colleges are not limited to the time required to repair or rebuild but cover the entire school year. Forms for mining risks are similar to those for manufacturing risks, except that mine fires are excluded, only buildings above ground are insured, and no storehouses, commissaries, dwellings, or contents of these are included.

Types of contracts. All forms of contracts with the exception of the gross earnings form may be used for manufacturing, mining, mercantile and nonmanufacturing risks. With respect to the nature of the indemnity and the amount of insurance, they may be classified into two main groups, coinsurance forms and limited indemnity forms, as follows:

1. Coinsurance forms. In these forms, until recently called "contributory" forms, no specified limit of indemnity per day or week is named, and, consequently, the insured is required to carry a certain per cent of

insurance to value. There are three principal coinsurance forms: the "two-item Eastern" form, the "gross earnings" form, and the "specified time" form.

(*a*) *The two-item coinsurance form.* This is the most common form, and has served thus far for illustration. It may be used for manufacturing, mercantile, or other risks. Its advantage is that the insured is required to estimate only his total annual profit and continuing expenses, and thus not compelled to buy a specific daily amount of insurance, as is necessary under per diem and weekly limit policies. Even the disadvantage of an annual estimate is largely removed when an "agreed value" clause is used. It also permits the insurance of only 90 days' ordinary wages, thus enabling insurance of this item for short interruptions without an unnecessary amount of insurance. Because of these features this form has proved of wider usefulness than others for businesses of a fluctuating character. A higher rate is charged for this form than for others, but greater satisfaction is likely to be derived from it.

Although it permits the insured to choose the amount of insurance he will carry, it contains a requirement that the insured must carry an amount of insurance equal to a certain per cent (usually 80) of the annual profit and expense, or the loss will be paid in the proportion that the insurance carried bears to the insurance required. In our previous illustration, the insured should be carrying at least 80 per cent of $100,000, or $80,000 insurance, in order to recover in full. If he carries only $54,000 insurance, for example, he can recover on a $10,000 loss only 54/80 of $10,000, or $6,750. On a loss of $72,000, his recovery is limited to $54,000 by the face of the policy. Failure to carry the required amount of insurance precludes any chance of recovering losses exceeding the face of the policy and reduces pro rata the recovery on small losses. On the other hand, if he estimates his necessary insurance at $100,000 he can recover only the annual amount actually being earned and expended or $90,000, and therefore is carrying too much insurance at the time of the loss.

A form with 100 per cent coinsurance instead of 80 is available at a lower rate; but the reduction in rate is sometimes insufficient to counterbalance the increased amount of insurance required, with the result that the total cost is higher. The insured must also be able to guess *exactly* his future earnings and expenses. Inasmuch as re-operation is not often delayed a whole year, the 80 per cent form is then preferred.

The necessity for guessing the amount of insurance required is avoided in some rating jurisdictions by attaching to the form an "agreed amount clause," in which, for the purpose of coinsurance, 80 per cent of the profit and expenses is agreed to be $..... The insured can thus be sure that the amount carried satisfies the coinsurance requirement and will cover losses in full up to the face value of the policy. This is a highly desirable endorsement, but unfortunately it is frequently limited to nonmanufacturing and mercantile risks of fireproof or sprinklered type, adds say 5 per cent to the cost, and requires special application to the rating au-

thorities and filing of a statement of the operations of the preceding 12 months.

(*b*) *Gross earnings form.* This form is now available for both mercantile and manufacturing risks. It covers the loss in gross earnings, which is defined as the total sales value of production less the cost of raw material (in the mercantile form, as the total net sales less the cost of merchandise sold). The insured may select the proportion of gross earnings to be insured, taking from 50 to 80 per cent insurance as he may desire. There is appropriate increase of the rate for lower coverage. It will be noted that the entire payroll is covered under this form, if desired.

(*c*) *Specified time form.* A new type of coinsurance form, as yet in use only in Texas and on the Pacific Coast, is the "specified time" form, which derives its name from the fact that it stipulates a definite period of time for restoration and resumption of business, and this period of time serves as a limit upon the company's liability. This period is expressed as a per cent of 300 (or 365) days, and the insured may select the period most appropriate to his case. It differs from the Eastern two-item coinsurance form, which covers the indefinite period "required with the exercise of due diligence and despatch to rebuild, repair or replace." Under the specified time form, the ordinary risk can take the time necessary to resume, whereas exceptional risks must be insured for longer periods at additional cost. As a consequence a possible cause of controversy in the event of loss is avoided.

Another distinctive feature of the specified time form is that it is a three-item form covering:

(I) Net profits that are prevented by the physical damage,

(II) Fixed charges and expenses, enumerated, item by item, and

(III) Specified amounts per day for a definite number of days, for (a) light, heat, and power; (b) payroll of department heads not under contract; and (c) labor payroll.

Thus this form is more flexible than the Eastern two-item coinsurance form.

The third distinctive feature of this form is that it contains a coinsurance clause requiring varying per cents of insurance on Items I and II, and 100 per cent coinsurance on Item III.

2. Limited indemnity forms. In these forms the insured's recovery is restricted by the naming in the contract of a fixed maximum indemnity for each day, or week, or month of suspension. These are not valued contracts, however, for the amount specified is merely the maximum amount of recovery for total suspension and the basis for calculating the maximum indemnity for partial suspension. The insured's recovery is limited to his actual loss. This group of forms includes the "straight (or steady) per diem" form, the "straight (or steady) weekly and monthly" forms, and the "fluctuating per diem, weekly and monthly" forms.

(*a*) *Straight per diem form.* Under this form, which is going out of general use, the insured must estimate his *daily* profit and continuing expenses, as has been done on page 429, and this estimate is applied to every day of the year. Since earnings and expenses usually vary from time to time during the year, the insured is either carrying more insurance than he can collect, or is underinsured and subject to only partial recovery. This situation is illustrated by the accompanying diagram. The per diem form is therefore appropriate only for risks that have a steady rate of operation throughout the year, but to such risks it offers a lower rate than any other form. In order to insure any part of the ordinary payroll a full year's payroll must be covered, and the cost is thus increased out of proportion to the benefit to be derived. Otherwise the form covers only the salaries and wages that must "necessarily continue."

Since a daily limit of indemnity is stipulated in this form, insurance for less than the highest estimated daily amount is likely to result in recovering less than the full loss. This statement is also true in case of partial interruption, because it is agreed that recovery for such losses shall be in the proportion that the daily limit taken bears to the daily amount that would actually have been earned during the interruption period. In this respect the form operates in a manner analogous to a 100 per cent coinsurance requirement.

(*b*) *Weekly and monthly limit forms.* In order to reduce the disadvantages of the per diem policy, forms with weekly or monthly limits are provided. There are only 52 or 12 opportunities, respectively, for the actual loss to vary from the insured's estimate. These forms have been used principally for mercantile risks. Such risks are likely to have daily variations within a week but fairly steady earnings from week to week, and to require the insured to cover the highest daily amount would necessitate his carrying an unnecessarily high amount of protection. If week-to-week earnings are not fairly steady, a policy with nonuniform weekly or monthly limits is indicated.

(*c*) *Fluctuating limits.* In order to take care of risks whose earnings fluctuate widely by season, a form is provided which allows the insured to vary the per diem or weekly limit for different periods of the year. For example, the per diem or weekly limit may be only half as much during the slack season as during the busy season, or the limits may be different for every week of the year. Thus the estimate made of periodic earnings can be brought more nearly in accord with actual conditions. The uncertainty of excessive or inadequate coverage is not entirely eliminated, for the estimates may prove wrong. This form is applicable only to cases in which, although earnings vary, the variations are known in advance, as in resort hotels, sport stadiums, and the like.

Comparison of forms. The disadvantage of the limited indemnity forms is illustrated in the diagram opposite. The first three and last three months of the year are enough to illustrate the point. The bars show what the actual earnings would have been for the months indicated, and we shall suppose that there are two interruption losses during the

year, one during January, February, and March, and another during October, November, and December. The horizontal straight line extending throughout the year shows the fixed per diem limit that might be set. In January, February, and March, the average per diem loss is $300, shown by the short horizontal line, and since this is below the per diem limit, the insured recovers in full. But when the individual bars are below the per diem limit, the policyholder was overinsured. In the last three months of the year, the average loss was $733, but the per diem is only $400; the insured therefore loses the difference. During November and December, the per diem limit left him much underinsured, as

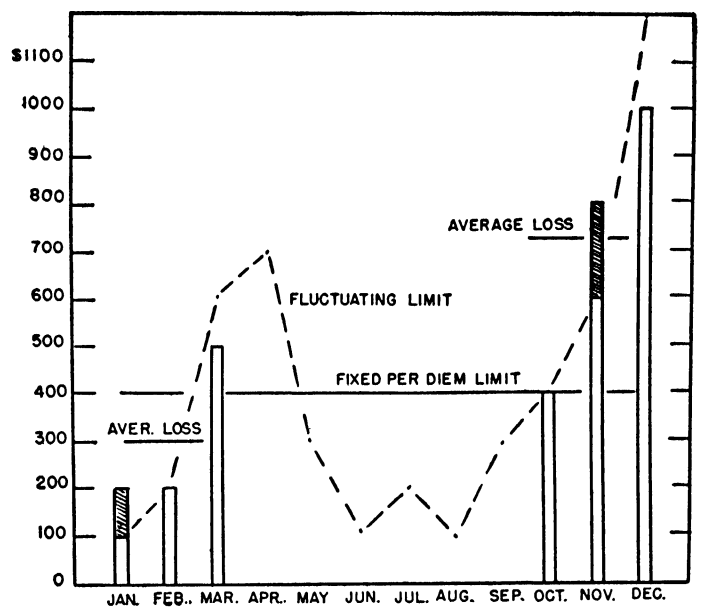


Fig. 18. Comparison of Use and Occupancy Forms

shown by the distance of the bars above the limit line. Under a fluctuating limit form, the straight line is replaced by the dash curve, representing monthly limits. The shaded portions of the bars represent what the insured could not collect, for they are above the fluctuating limit line. During other months the limit is sometimes higher than the insured needs.

Premiums. The premium rates for use and occupancy insurance are per cents of the fire insurance rates. If the use and occupancy form covers only the repair or replacement of building and equipment, the rate used as a basis is the building rate, usually on an 80 per cent coinsurance basis. If the use and occupancy form covers also the replacement of stock, the rate basis used is the fire insurance rate for building or contents, whichever is higher. In the absence of accumulated use and occupancy experience, the fire insurance rate is considered the best measure

available of the probability of fire occurrence, and is therefore used, although it bears no necessary relation to the extent and duration of interruption. Risks with low fire insurance rates, in some jurisdictions at least, are not subject to the published rules and rates, in order to permit competition with mutuals.

Manufacturing and mercantile rates are both per cents of the fire insurance rate, but mercantile rates are only about one half as high as those for manufacturing risks. The difference is due to the fact that the resumption of business is not delayed by the necessity of acquiring and setting up machinery, accumulation of a stock, specially constructed buildings, and so forth. For each of these two types of risks, rates are quoted for the coinsurance and limited indemnity types of contracts. The rates for the coinsurance form are, say, 50 per cent higher than for the per diem policy. The weekly and monthly indemnity forms are slightly higher than the per diem form, partly because not as much insurance is necessary to cover the probable loss.

The rates for the specified time form are either per cents of the fire insurance building rate or per cents of the rate quoted for the per diem policy in the same jurisdiction.

School use and occupancy. For the use of schools, colleges, and other educational institutions, a "Tuition Fees Form" for use and occupancy insurance has been adopted in some jurisdictions. It covers the loss of tuition fees and other income from students, less noncontinuing expenses, for the period of interruption ending with the 30th day immediately preceding the school year, although restoration may have been completed earlier. It is predicated on the idea that the availability of the school for use in the middle of a school year would be of little value because no students could be secured at that time. The 30-day period gives an opportunity to organize for the coming school year. This is a 100 per cent coinsurance form.

When a single building is involved, the rate is the 80 per cent coinsurance building rate. When more than one building is involved, the rate is the average of the 90 per cent coinsurance building rates.

Contingent use and occupancy insurance. This insurance protects the insured against loss of earnings owing to interruption of business because of physical damage to the buildings, machinery, or stock of another concern, the damaged concern being unable to supply the insured with materials, supplies, parts, or services upon which the insured is dependent. A contingent policy may cover one or a number of such auxiliary concerns. These auxiliary concerns, for example, may be furnishing motors, bodies, wheels, and so forth, to an automobile manufacturer, and an interruption to any of them may cause a loss of earnings to the automobile manufacturer. The insurable value is the same as in direct use and occupancy insurance. No uniform form of endorsement is in general use.

In the eastern states, the contingent use and occupancy rate for the coverage of an auxiliary plant is the same as the use and occupancy rate on the auxiliary plant. When more than one auxiliary plant is covered,

the contingent use and occupancy rate is the highest use and occupancy rate for any plant, with the addition of a few cents for each plant in excess of one. In other territories, three rates are quoted: for concerns all of which take a use and occupancy rate of $.20 or more, for concerns all of which take a use and occupancy rate of between $.15 and $.20, and for concerns all of which take a use and occupancy rate of less than $.15.

Extra expense insurance. Use and occupancy insurance does not furnish complete protection for a number of businesses because it does not authorize extraordinary expenditures unless they reduce the use and occupancy loss. Certain businesses, however, such as newspapers, magazines, milk distributors, public utilities, laundries, and the like, must continue operations regardless of expense. "Extra expense" insurance is intended to reimburse the insured for necessary extra expense incurred in order to continue the normal conduct of his business immediately after physical damage. It may be necessary, for example, to contract with another concern to perform the operations or render the service that the insured himself would have done under normal conditions. In many instances, therefore, extra expense insurance replaces use and occupancy insurance. If the earnings will be decreased in spite of the extra expense, use and occupancy insurance is needed in addition.

The policy does not cover loss of income, extra expense entailed by building laws or ordinances, cancellation of leases or written agreements, or repair of physical damage except such repairs as exceed normal cost and are for the purpose of reducing the total amount of extra expense, and to the extent that this reduction is effectively accomplished. Extra expense does include the cost of obtaining property for temporary use during the period of restoration.

Two forms are used: (1) a form that places no limitation on the time during which the extra expense is incurred (other than for the resumption of normal operations and not to exceed one year); and (2) a form that requires that the extra expense be distributed in certain proportions each month. The rules usually require that in the latter form the face of the policy must be distributed over at least three months and that not more than 40 per cent of the face of the policy shall be extra expense in any one month.

If, for example, an insured wishes to be protected against an expenditure of $40,000 during the first month after the physical damage, $30,000 during the second month, $20,000 during the third month, and $10,000 during the fourth month, he must have a policy with a face value of $100,000. The limits are expressed as 40 per cent of the face during the first month, 70 per cent during the first two months, 90 per cent during the first three months, and 100 per cent during the first four months. If the actual expenditures during the four months aggregate only $75,000, the balance of the face value may be used during the fifth and succeeding months, if found necessary. The nature of the limitation is due to the fact that extra expenses are likely to be unusually heavy immediately following a fire or other damage, and there is unusual incentive to increase the loss at this time.

For the limited monthly expenditure form, rates are based on the 80 per cent coinsurance fire rate on the building, with multipliers for each month in which expenditures are to be made. In the illustration above, if the building fire rate were $.60 per hundred, the premium would be:

Month	*Fire Rate*		*Multiplier*		*Insurance*		*Premium*
1.....	.60	×	2.60	×	$40,000	=	$624.00
2.....	.60	×	1.85	×	30,000	=	333.00
3.....	.60	×	1.40	×	20,000	=	168.00
4.....	.60	×	1.20	×	10,000	=	72.00
							$1,197.00

For the unlimited monthly expenditure form, the rate may be from three to five times the fire rate on the building. In the example above this would amount to .60 × 3 × $100,000, or $1,800.

Rent and leasehold insurance. This is a form of insurance designed to protect the insured from the loss of use of a property following fire or other physical damage to the property. Fire, explosion, windstorm, riot, and other direct property damage policies cover the damage to the physical property, but since an interval must elapse for repair of the property, its use is lost during this interval. This "use value" (as distinguished from the "contract value" or rent that may be stipulated in a lease) may be covered entirely by rent insurance or partly by rent insurance and partly by leasehold insurance, under different circumstances. Both of these forms of insurance, which are identical in purpose and supplement each other, are written by endorsement to a fire insurance policy.

Insurable interest. Most of the confusion arising in this subject comes from a failure to analyze the insurable interest of the persons interested in the property, namely owner and tenant. Such confusion is not strange, inasmuch as their relationship may be determined by anything from a vague oral lease, in which the parties probably failed to consider the loss of use following physical damage, to a complicated written contract provision. A clarification of this problem of insurable interest is therefore in order.

If a building is owned by *O* (owner), it may either be used by *O*, in which case he is the only party interested, or it may be leased by him to *T* (a tenant). In the first case the situation is simple. The result of physical damage to the property is *O*'s loss of use of the property, and the entire insurable interest is *O*'s. Its extent is measured by the "use value" of the property, or what it would cost *O* in the market to obtain the use of a similar property. This is usually called the rental value, to distinguish it from an amount of rent that would be named in a contract, and this rental value may be insured in a rent insurance contract.

In the second situation, *O* leases the property to *T*, there being an oral or written lease. Residences and small properties are frequently rented without any written contract, whereas valuable properties are usually rented under a written lease, but although the rights of the parties may be different, the legal relationship is of the same nature in either case.

Under the terms of the oral or written lease, various situations may exist: (a) nothing may be said regarding the status of the parties following a fire, in which case their status is determined by common law or by statute, if one exists in the state;[2] (b) the lease may provide that the lease is terminated if the property becomes untenantable; (c) the lease may provide that the owner has the option of terminating the lease when the damage is extensive; or (d) the lease may provide that the tenant has the option of terminating the lease when the property is untenantable or the damage is extensive. It is evident that when an agreement has been made, the status of the parties depends entirely upon the terms of the agreement, which may be expressed in any sort of language. But the result, of interest to us here, if one can determine it in advance of a court decision, is either (a) that the owner is at a loss or (b) that the tenant is at a loss.

I. If the loss falls on the owner, the extent of his loss is measured by the "contract value" or rent stipulated in the lease (less continuing expenses such as taxes). For if there had been no physical damage, this amount is the most he could have collected. This amount he may insure under a rent insurance policy.

The "use value" of the building, however, may be more than the "contract value," because the property may have become more valuable after the lease contract was entered into. *T* may lease a building from *O* for a term of 50 years at an annual rental of $20,000, and the building may, either at the time of the contract or later, be worth *to T* $25,000 a year. The reason may be that a similar building or one just as good would cost *T* $25,000 or that *T* is subletting the building to others and deriving $25,000 from it. In either case the *excess* of the use value over the contract value is called "leasehold value," and the tenant may insure it by leasehold insurance.

II. If, on the other hand, by the terms of the lease, the loss in the event of physical damage is to fall on *T*, the extent of the loss is measured by the use value to *T*, or the "rental value," and it may be covered entirely by rent insurance. No leasehold insurance is required because the leasehold value is included in the rental value or use value.

III. When the lease gives *T* the *option* of terminating the lease, exercise of the option will result in a loss to *O*. This loss is measured by the contract value of the building, because an amount equal to that value is the most *O* could have collected had there been no physical damage. There is presumably no excess of use value over contract value belonging to *T* or he would not terminate the lease. *O* could cover this financial loss with rent insurance.

IV. When *O* has the option of terminating the lease, exercise of the

[2] For example, at common law if nothing is said, the tenant is usually liable for the continued payment of rent following the fire. In New York State, a statute exists which provides that the tenant may, at his option, terminate the lease and be no longer liable for rent, if the property is rendered untenantable. Under this statute, therefore, the owner loses the rent that the tenant contracted to pay. In other states, statutes absolutely terminate the lease or suspend the payment of rent while the property is untenantable, and the owner loses the rent.

option will presumably result in no loss to him or he would not terminate the lease, but the excess of the use value over the contract value, which belongs to *T*, can be insured as leasehold value under leasehold insurance. The following table serves to summarize all these situations:

Owned by	*Occupied by*	*Result of Event*	*Insurable Interest*		*Insurance*
			Person	*Extent*	
O	*O*	Loss of use of property	*O*	Use value of property	Rent Insurance
O	*T*	I. Loss to *O* of rent.	*O*	Contract value (rent)	Rent Insurance
		Loss to *T* of excess of use value over rent.	*T*	Excess of use value over contract value	Leasehold Insurance
O	*T*	II. Loss to *T* of use of property.	*T*	Use value (rental value)	Rent Insurance
O	*T*	III. Option of *T*. Loss by *O* of rent.	*O*	Contract value	Rent Insurance
		Loss by *T* of leasehold value.	*T*	Presumably zero	None
O	*T*	IV. Option of *O*. Loss by *O* of rent.	*O*	Presumably zero	None
		Loss by *T* of leasehold value.	*T*	Excess of use value over contract value	Leasehold Insurance

Rent insurance policies. The rent insurance contract is constructed by attaching an endorsement to a fire insurance policy (or other property damage policy), or by inserting rental value as a separate item in a building form. It protects the insured from loss of rents or rental value on property rendered untenantable by fire or other physical damage. The forms used vary in different parts of the country, but the essential features are the same.

The number of months for which the company's liability extends varies with different forms, but in every case the recovery is limited to the net income that the insured would have received from the property had no physical damage occurred. Deduction must be made for any discontinuing expenses, but these are usually of slight importance. As in use and occupancy insurance, the period of indemnity must begin within the term of the policy but may extend beyond the termination of the policy as long as the extension does not exceed one year.

Three groups of rent insurance contracts are written. The first group

consists of contracts that cover the loss of rents on the entire property, whether rented or vacant. They completely protect the insured even though part of the property is not rented at the time of the damage.

The second group covers the loss of rent only on those portions of the property which are rented at the time of the physical damage.

The third group covers seasonal dwellings or properties customarily rented only during a portion of the year. This group takes about the same rates as the first group, for it covers the entire premises whether rented or vacant. The company is liable only when the physical damage occurs during certain portions of the year, with provision made for damage occurring at other times when the delay occasioned by repairs will interfere with the season's renting.

In each group the insured can select one of two types of limits of insurance: (a) a form that requires insurance of a full year's rental, or (b) a form that allows the insured to insure less than the full year's rental, the amount selected being about enough to cover the estimated time necessary to repair or rebuild. The first form involves carrying a larger amount of insurance, but it gives complete protection because it will cover any time required for repairs up to one year, and it receives a lower rate than the limited period form.

As in use and occupancy insurance, the rates for rent insurance are determined as a per cent of the fire insurance rate on the building, for the latter rate is supposed to measure the probability of occurrence of fire. For loss of use owing to hazards other than fire, the rate for the hazard in question is the determining factor. This rate is usually further modified when the form that requires insurance of a full year's rent is used, because such coverage is analogous to complying with a 100 per cent coinsurance requirement.

Leasehold insurance. It has already been explained how leasehold insurance is useful when a tenant has leased a property with a use value to him greater than the contract value in the lease, whether such excess be due to his having made a profitable lease, to improved business conditions, to improvements in the building, to improvement in the neighborhood, or to his subletting the premises for more than he contracted to pay. A loss to the tenant results from either (a) termination of the lease or, (b) in the event the lease is not terminated, the loss of use of the premises during the period of repair. It is important to note that the extent of the tenant's loss in the former case depends upon the length of time the lease has yet to run.

The forms in use differ in different sections of the country, in some territories there being no mandatory form, but the essential features do not vary greatly. The policy promises to pay the discounted value of the difference between the rental, or "use," value of the premises and the rent required by the lease (a) for the unexpired term of the lease if the lessor cancels the lease, or (b) for the time necessary to render the premises again tenantable if the lessor does not cancel the lease, if that time does not extend beyond the expiration date of the lease. If the lease is canceled and the tenant continues to occupy the premises under a new

lease, the payment of rent under the terms of the new lease is the tenant's actual loss. In Texas the provisions of rent insurance are incorporated in the provisions of the standard printed policy.

It will be noted that the policy amount is a diminishing amount, because as the term of the lease approaches its end the total value of the lease decreases. As each month elapses the face value of the policy is reduced by the discounted value of that month's leasehold value until, at the expiration of the lease, the face of the policy is zero. Since rental values frequently change, policies are usually written for short terms, such as one or three years, and renewed with an adjustment of the leasehold value. If the insured does not carry an amount of insurance equaling the value of the unexpired term of the lease, his recovery is reduced pro rata. In some instances the form requires the amount of insurance to be the undiscounted value of the lease, with the rate calculated accordingly, but this requirement merely saves explaining to the insured the nature of the discounting process, for in the event of loss the policy pays the discounted value only.

Since the company's liability for loss is largely determined by the terms of the cancellation clause in the lease, this cancellation or "fire" clause of the lease is incorporated as part of the leasehold insurance form. A number of companies do not care to write the insurance if the cancellation clause becomes operative at less than 50 per cent damage to the property, and in some territories adjustment is made in the rate for the extent of damage specified in the cancellation clause of the lease. If the lease contains no cancellation provision, the terms of the state statute are adopted in the insurance contract.

The company is not liable under the leasehold policy for (a) the insured's exercise of an option to cancel the lease, (b) the enforcement of an ordinance or law relating to the construction or repair of buildings, or (c) the suspension, lapse, or cancellation of any license.

The leasehold rate is usually the fire insurance rate on the building, unless a special form is used. In some territories this rate is modified by a discount for fireproof or other superior construction and an allowance is made for the per cent of damage justifying cancellation of the lease. For example, 10 per cent discount may be given if the lease requires for cancellation 25 per cent damage to the property, and 25 per cent discount if the lease requires 50 per cent damage to the property. The rate is applied to the average amount at risk, that is to say the average of the face values of the policy at its inception and at its termination. If a three-year policy were issued on a lease having 90 months to run, the leasehold interest being $77,863.30 at the time the policy was written and $49,441.10 at the time the policy expired, the rate would be applied to $63,652.20

Profits and commissions insurance. This form of protection is designed to cover the profit on finished goods or the commissions earned from the sale of such goods, i.e., profits and commissions that could not be realized if the goods were destroyed by fire. Such insurance is useful because the ordinary fire policy covers no profits, and use and oc-

cupancy insurance indemnifies only for profits on goods that might have been manufactured after the fire. It will be seen that profits insurance is unnecessary on staple goods whose fire losses are usually adjusted on the basis of market values or on property whose fire policy contains a specific agreement to adjust losses on the basis of market values.

This insurance may be very useful to a manufacturer whose deliveries reach peaks at certain seasons of the year and who therefore piles up finished goods in the factory or warehouse between peaks. A fire might occur at a time when it would be too late for him to remanufacture for the season. Similarly, a manufacturer may have on hand stock of special style or quality that could not be replaced in time for the season intended. Salesmen frequently operate under contracts by which they are paid commissions only when the goods have been delivered and paid for, and destruction of the goods might therefore greatly reduce their commissions. A commission man or other middleman may have sold to a purchaser goods which are awaiting delivery and which he would be unable to replace, thus losing his profit or commission. Profits and commissions insurance is not intended for the ordinary steady operation of a retail merchandising or commission business that could be covered by use and occupancy insurance. In a steadily operating business, if the goods could be replaced within a period less than the ordinary turnover period, the profits policy would pay the insured more than the profits actually lost and would thus be subject to abuse.

The policy promises to pay, on goods destroyed or damaged by fire, the profits or commissions on the damaged goods located in the factory, in storage warehouses, or on consignment for sale. The forms do not give any specific definition of profits or commissions, and vary considerably in wording in different territories.

Two forms are in common use. *Form 1* measures the company's liability in the event of loss by the per cent of damage to the goods. If the goods are damaged to the extent of 50 per cent of their total value, the company is liable for 50 per cent of the total profits that would have been made by the sale of those goods undamaged. This form is used in eastern and southeastern territories only. The goods may be damaged 50 per cent, and, if the profit margin is greater on the damaged portion than on the undamaged portion, it could be that 60 per cent of the profits are lost. Of course, in some instances the insured would recover more than the profit actually lost, for the loss of profits bears no constant relation to the loss of goods. *Form 2* measures the company's liability by the actual profits lost, without regard to the extent of damage to the goods. This form is available in all territories. *Form 1* gives a limited amount of protection only, but is sold at a lower rate.

The first form is sold in southeastern territory with certain modifications. The insured can recover only the lowest of the following amounts: (a) a percentage of profits equal to the percentage of damage to the goods; (b) the actual profits lost on the damaged goods; (c) the actual loss of profits resulting from loss of sales; (d) that proportion of (a), (b), or (c) which this policy bears to 80 per cent of the prospective

profits; (e) that proportion of (a), (b), or (c) which this policy bears to the total insurance under all policies. When *Form 2* (the actual profits form) is used, the limit (a) is removed. It can be seen that these provisions operate to reduce the insured's recovery in numerous cases and introduce a coinsurance requirement that is not used in other territories. They place the insurance on an indemnity basis rather than a valued basis.

The rates for profits and commissions insurance of the limited form are ordinarily the fire insurance rates on the goods. When both forms are in use, this rate is increased 50 per cent for the unlimited form. When the coinsurance requirement is included in the contract, the rate varies with the percentage of insurance required.

Accounts receivable insurance. This form of insurance protects the insured against loss resulting from inability to collect business accounts owing to him, when such inability arises from destruction of his accounting records by fire, explosion, or other direct property damage. The policy is a reporting form such as was previously described under "general cover" contracts and is described more fully in Chapter 25.

Unearned premium insurance. One of the results of a fire is that the insured loses the premium on the amount of the loss for the balance of the term of his fire insurance policy. When a fire loss is paid, the premium on the amount of the loss is considered to be fully earned, and the insured must pay an additional premium to restore the policy to its original amount. For example, if there were a total loss on a $400,000 three-year policy the day after it was issued, the insured would have paid the entire premium for two days' protection and would have to pay again the same amount to continue the original amount of fire insurance. This demand comes upon him at an inconvenient time, after he has sustained a fire loss. Unearned premium insurance covers this loss of premium.

Since the amount of unearned fire premium becomes less as the fire policy term elapses, reaching zero at the expiration of the term, the face amount of the unearned premium insurance is a decreasing amount. It averages, during the term of the fire policy, one half of the fire premium. The rate for the unearned premium insurance should be, of course, the same as the original fire rate, but one half of this figure is used to compensate for the gradual reduction in face value. Thus if the rate on a $400,000 policy was $.40 per $100 for three years' protection and the premium $1,600, the cost of the unearned premium insurance would be $\frac{1}{2} \times .40 \times 16 = \$3.20$. If at the end of half a year the property was damaged 50 per cent by fire, the insured would receive $200,000 plus $666.67 unearned premium.

This insurance is always written as an endorsement on the fire insurance policy to which it pertains, except in Texas, where it is an integral part of the printed fire policy.

Demolition cost insurance. This is an endorsement added to a fire insurance policy assuming liability for any increased cost of repair to buildings damaged by fire, if such increase be due to legal requirements regulating modes of construction. The fire insurance policy disclaims

any liability for loss occasioned "by ordinance or law regulating construction or repair." Although the Massachusetts form is silent on this point and the courts have held the insurance companies liable for such losses in Massachusetts, it has been the custom for years to make the Massachusetts policy conform to the New York policy by adding a clause disclaiming such liability; in practice, therefore, the policies are the same in this respect. City ordinances may prohibit the rebuilding of frame buildings, prohibit the use of wooden shingle roofs, or require particular types of construction in certain sections of the city. Such laws may involve: (a) measures that may be ordered at any time in the interest of public safety, such as the addition of fire escapes, sprinklers, or fire exits; and (b) structural changes required as a condition for repairing damage after a fire.

The demolition endorsement promises to reimburse the insured for the latter losses by providing (a) that the insurance company will be liable for any additional cost, resulting from such ordinances, of repairing portions of the building damaged by fire and (b) that the insurance company will pay for the demolition, required by such ordinances, of any portion of the building undamaged by fire. The Supreme Court of Massachusetts has held that the demolition endorsement is inapplicable to cases of total loss, and thus an insured cannot require the company to provide him with a $10,000 brick building to replace a $4,000 frame building, because the reconstruction of the latter is rendered impossible by ordinance.

Consequential damage form. In this the company assumes liability for losses that are not the direct result of fire but are more or less remote consequences thereof. For example: a fire damages the plant that controls the temperature of a cold storage warehouse, the resulting rise in temperature damaging the contents of the warehouse. With the consequential damage form, the warehouse contents are covered.

Summary

I. Use and occupancy insurance.
  A. Covers inability to operate after the physical damage occurs.
  B. Basis of insurable value is estimated profits and continuing expenses.
  C. Indemnity extends over period required to resume operations.
  D. Insured's recovery for loss is governed by
    1. Whether interruption is partial or complete.
    2. Actual loss sustained.
    3. Period required for resumption of operations.
    4. Face value of policy.
    5. Coinsurance requirements.
  E. Insurance also written on risks other than manufacturing risks.
  F. Types of contracts include
    1. Coinsurance forms.
    2. Limited indemnity forms.
  G. Comparison of types of contracts.
  H. Premium rates are based on peril involved, e.g., fire.
  I. Contingent use and occupancy form covers operation of auxiliary concerns.

II. Extra expense insurance covers extra expense required for immediate resumption of business.
  A. Two forms are used:
    1. Without limitation on distribution of expense.
    2. With limitation on distribution of expense.
III. Rent and leasehold insurance covers loss of rents or rental values.
  A. The need for insurance and extent of insurable value are governed by the contract relations of lessor and lessee.
  B. The policy contract summarized.
  C. Three groups of contracts are written.
  D. Rates are based on the peril involved, e.g., fire.
  E. Leasehold insurance covers excess of rental value over rent.
    1. Indemnity depends upon the value of the lease.
    2. Rates depend upon rates for the peril involved.
IV. Profits and commissions insurance covers the profit on finished goods.
  A. One form bases loss payment on extent of damage to goods.
  B. Another form is based on actual loss of profits.
V. Accounts receivable insurance protects against inability to collect debts, owing to physical damage to accounts.
VI. Unearned premium insurance covers prepaid premium lost by physical damage to the property insured.
  A. Rate is based on the fire insurance rate.
VII. Demolition cost insurance covers increased cost of repair owing to building regulations.
VIII. Consequential damage form covers indirect results of the peril, such as changes in temperatures of buildings.

Readings

Kahler, Clyde, *Business Interruption Insurance.* Philadelphia: privately printed, 1930.

Kahler, Clyde, "Business Interruption Insurance." *The Annals of the American Academy of Political and Social Science,* Philadelphia, March, 1932.

Stock, Thompson, *Applied Fire Insurance.* Detroit: Stock Publishing Co., 1939, Chaps. 19, 20.

Minor, C. D., "Outline of Use and Occupancy Insurance." Royal-Liverpool Groups, *Sales and Service Manual,* Section I, March, 1938.

Royal-Liverpool Groups, *Sales and Service Manual,* Section I, Special Service, March, 1938.

Howe, Walter C., Jr., "Coverages and Modifications." *Weekly Underwriter,* September 7, 1940.

Foster, W. S., *Consequential Coverages.* Indianapolis: Rough Notes Co., 1936.

Brown, F. W., "Some Thoughts on the Demolition Clause." *The Standard,* September 20, 1916.

Hubbard, C. T., *Where Fire Insurance Leaves Off.* New York: F. S. Crofts Co., 1930.

Withers, K. W., *Use and Occupancy Insurance.* San Francisco: The Author, 1943.

Miller, J. S., "Buying and Administering Business Interruption Insurance," *New York Certified Accountant,* October, 1946.

Aetna Casualty and Surety Co., *Aetna Agency Guide.* Hartford: the Company, periodically.

Problems

1. The Cable Co. operates a manufacturing plant 300 days a year. Its expenses last year were: raw material, $140,000; taxes, $5,000; interest, $5,000;

royalties (continuing), $11,000; labor, $310,000; salaries, $30,000. Its gross earnings were $600,000. A use and occupancy policy for $120,000 insurance is obtained, and during the policy period a loss by fire causes a total suspension for 60 days and 25 per cent operation for 120 days. During the policy period the plant has been operating at 50 per cent capacity, it is agreed, and costs and prices are approximately the same as previously. How much insurance would have been required for full protection under the two-item coinsurance form? How much can the insured recover on the loss?

2. In the fire referred to in Problem 1, goods were burned which cost $8,000 to manufacture and were expected to sell for $12,000. How much can be recovered on these?

3. If the concern in Problem 1 were a textile concern whose production was 15 per cent in each of the months of November, December, January, and February, 10 per cent in March, 5 per cent in each of the months of May, June, September, and October, and nothing in July and August, what provision should be made for this variation in a use and occupancy form?

4. On which would the use and occupancy rate probably be higher, a bakery in a brick building or a manufactory of tinsel ornaments in a semifireproof building?

5. Suppose Culp insures under a straight per diem use and occupancy policy for $500 a day profit and expenses. What is the disadvantage if the results during the policy year prove to be January 400; February 400; March 600; April 500; May 400; June 300; July 200; August 200; September 400; October 600; November 800; December 900? Would his situation be improved under a fluctuating monthly limit form specifying $250 a day during June, July and August and $600 a day for the other months, provided the actual results prove to be the same as before?

6. What use and occupancy insurance, in addition to the ordinary manufacturing form for use and occupancy, would be useful to (a) the Eagle Aircraft Construction Co., (b) the Excelsior Weekly Farm Journal Co.? Give your reasons.

7. In Problem 1, if the "ordinary payroll' amounted to $210,000, how much insurance would be required on "ordinary payroll" under the two-item coinsurance form? Why might a business desire to insure it?

8. In Problem 1, the figure for gross earnings less noncontinuing expenses equals the figure for gross earnings plus continuing expenses. Is this agreement mere accident?

9. Is there any difference between a fire policy carrying an endorsement that adjustments shall be based upon market value of goods and a policy without such endorsement but with a profits form attached?

10. Sikes leases his building to Taylor for $12,000 a year, lease to terminate and rentals to cease in the event of fire. What types of rent insurance are available to cover Sikes and/or Taylor?

11. Samuels owns a row of 25 garages, one-car capacity each, which he rents to various automobile owners. What form of rent insurance would be suitable for this case?

12. *O* leases his apartment house to *T* for ten years at an annual rent of $60,000, with a provision that *T* may terminate the lease if the property is damaged by fire to the extent of 60 per cent. *O*'s noncontinuing expenses are $1,000 a year. Assume that *T* can keep rented 70 of the 75 individual apartments at $100 a month each, and that his expenses of operation are $10,000 a year. (a) What opportunities for insurance arise out of this situation? (b) If the insurance term extends from June 1 to the following May 31 and a fire occurs on May 1, 13 months being required to repair the damage and render the property usable, how much can be recovered from the insurance company?

13. Ackerman, operating on a commission basis for the Apollo Box Co., sold

10,000 cartons to the Dickinson Soap Co. for delivery within two weeks. Ackerman's contract as salesman provides that he is to receive a commission on "all goods or merchandise delivered to and accepted by and paid for by the purchaser." A fire occurs one week after the sale, when 4,000 boxes were finished and on hand, destroying the 4,000 boxes completely. (a) Can the Apollo Box Co. recover on its ordinary fire insurance policy, without endorsements, for the profit it would have made on the 4,000 boxes? (b) How could Ackerman have protected his commission?

14. MacKenna insured his office building for $100,000, under a one-year fire policy with an unearned premium insurance endorsement. The premium rate was $.50. When the policy was exactly two months old, a fire caused $40,000 damage. What can MacKenna recover? How much premium did he pay for the endorsement?

CHAPTER 22

Settlement of Losses

Classification of Provisions Applying to Loss Settlements

The policy provisions that remain for discussion apply after a loss has taken place. They may be divided into four groups: (1) those referring to preservation of the property, (2) those dealing with proof of the amount lost, (3) those providing for settlement of disagreements, (4) those determining extent of the company's net liability. With regard to the requirements made of the insured, the courts have been lenient when they apply after a fire has occurred; but the requirements before a loss have been regarded as more important because they may serve to prevent a fire. The policy provisions following will be taken up in the order in which they naturally come into play in the course of the adjustment of a loss.

1. Provisions referring to the preservation of property. The policy requires that "the insured shall give immediate written notice:"

90 **Requirements in**
91 **case loss occurs.** The insured shall give immediate written notice to this company of any loss.[1]

That the insurer is entitled to notice of this important event is clear, inasmuch as it enables him to take action to reduce the loss by protecting the property, to investigate the cause of the fire, and better to determine his liability. Without such notice it is usually held that he is released from liability. But "immediate notice" is not always the prompt action that might be supposed. Although it would be unsafe for an insured to presume upon the leniency of the courts, it has been held that immediate notice is notice given within a reasonable time and that a delay of 30 days may be justifiable under certain circumstances. In another case, however, seven days was held to be an unreasonable delay, sufficient to release the company from liability.

[1] The New York 1943, New York 1918, New York 1886, Iowa, Massachusetts, California, and Ontario policies require notice in writing. The Texas policy does not require written notice. The New York 1943, New York 1886, New York 1918, and Texas policies require "immediate" notice, and Massachusetts and Ontario require notice "forthwith." The Massachusetts notice must be sworn to, the reason being, however, that the provision refers to more than a mere notice, as will be shown later. Iowa requires notice "as soon as practicable after he ascertains the fact of such loss," and the California policy requires notice "without unnecessary delay."

The next action required of the insured is to

> 91 **Requirements in** protect
> 92 **case loss occurs.** the property from further damage,

For such "further damage" resulting from neglect the insurance company is not liable, according to several decisions, since the fire policy is not designed to protect the insured against his own negligence or carelessness, but only against the danger of loss by fire. The cost of protecting the property is naturally considered a part of the loss.

After this protection has been effected, the insured is required to

> 92 forthwith
> 93 separate the damaged and undamaged personal property, put
> 94 it in the best possible order.[2]

This provision tends to protect such goods as are undamaged and enables the representative of the company to make an examination of the property and to take necessary measures for further protection. The insured is not required by this provision to restore the goods to the same condition as existed before the fire.

2. Evidence of amount of loss. The next few requirements are designed to make possible an estimate of the loss. The insured is required to

> 94 furnish a complete inventory of
> 95 the destroyed, damaged and undamaged property, showing in
> 96 detail quantities, costs, actual cash value and amount of loss
> 97 claimed.[3]

The required inventory is in the nature of a preliminary proof of loss. The following provision is not a mere direction to the insured of what his action should be, but is essential to enable him to claim from the company:

> 97 and within sixty days after the loss, unless such time
> 98 is extended in writing by this company, the insured shall render
> 99 to this Company a proof of loss, signed and sworn to by the insured,

[2] The New York 1886, New York 1918, Iowa, and California forms are identical with the New York 1943 policy, and the Ontario form is substantially the same. The Texas policy omits the words, "put it in the best possible order." The Massachusetts policy states that "the insured shall make all reasonable efforts to save and protect the same."

[3] The New York 1886, New York 1918, and California policies merely require a statement of "the quantity and cost of each article and the amount claimed thereon." Iowa makes no requirement as to an inventory. Texas merely requires a "complete inventory . . . showing in detail all costs." The Ontario policy and the Massachusetts policy contain no "inventory" provision (but see later under "proof of loss"). The California and the New York 1886 forms use the expression, "make" an inventory, and the New York 1918 and New York 1943 forms use the expression "furnish," thus leaving little doubt that the company is entitled to the benefits thereof. The former two refer to "each article"; the latter two specify the "destroyed, damaged and undamaged property."

100 stating the knowledge and belief of the insured as to the follow-
101 ing: (a) the time and origin of the loss (b) the interest of the in-
102 sured (c) and of all others in the property, (d) the actual cash value
103 of each item thereof (e) and the amount of loss thereto, (f) all en-
104 cumbrances thereon, (g) all other contracts of insurance, whether
105 valid or not, covering any of said property, (h) any changes in the
106 title, use, occupation, location, possession or exposures of said prop-
107 erty since the issuing of this policy, (i) by whom and for what pur-
108 pose any building herein described and the several parts thereof
109 were occupied at the time of loss and (j) whether or not it then
110 stood on leased ground.[4]

Attention is called here to the policy provision previously referred to regarding false swearing and fraud, which are not lightly regarded by the courts in the proof of loss, whatever may be the attitude at other times. The object of the proof of loss is to enable the insurance company to determine whether or not it will assume liability for the loss and to what extent. A time limit is placed upon furnishing the proof of loss, but this has been leniently construed sometimes by the courts. A form is furnished to the insured for the purpose of making a proof of loss. In several cases it has been held that these requirements are inoperative as regards a mortgagee because the company's contract with him is held to be a new contract. If the owner does not furnish a proof of loss, the mortgagee may do so for the protection of his interest. The New York 1943 policy provides that:

74 If the insured fails to render proof of loss, such mortgagee, upon
75 notice, shall render proof of loss in the form herein specified
76 within sixty (60) days thereafter and shall be subject to the pro-
77 visions hereof relating to appraisal and time of payment and of
78 bringing suit.[5]

[4] The lettering does not appear in the printed policy but is inserted here for convenience. The New York 1886, California, New York 1918, and Texas 1944 policies are substantially the same as the New York 1943 policy, but the Texas policy omits the section (h) and allows 91 days for submission. The Iowa policy requires merely that the insured "shall, within 60 days from date of loss, furnish this company with notice thereof in writing accompanied by affidavit stating the facts as to how the loss occurred and the extent thereof, so far as such facts are within his knowledge." California uses the words, "after the commencement of the fire," and under (a), asks for the "origin" but not the "time." The Massachusetts and Ontario forms are so different that they must be quoted. The Massachusetts form reads: "In case of any loss or damage under this policy a statement in writing, signed and sworn to by the insured, shall be forthwith rendered to the company, setting forth the value of the property insured, the interest of the insured therein, all other insurance thereon in detail, the purposes for which and the persons by whom the building insured, or containing the property insured, was used, and the time at which and manner in which the fire originated, so far as known to the insured." The Ontario policy provides: "Any person entitled to claim under this policy shall . . . furnish . . . therewith a statutory declaration declaring: (i) that the account is just and true; (ii) when and how the loss occurred, and if caused by fire, how the fire originated, so far as the declarant knows or believes; (iii) that the loss did not occur through any wilful act or neglect or the procurement, means or connivance of the insured; (iv) the amount of other insurance and names of other insurers; (v) all liens and encumbrances on the property insured; (vi) the place where the property insured, if moveable, was deposited at the time of the fire."

[5] The Texas policy is identical except that 91 days are allowed. The New York 1918 policy is substantially the same. The Massachusetts, New York 1886, Iowa,

The New York 1943 policy provides further that the insured

> and shall furnish a copy of all the descriptions and schedules in all policies and, if required, verified plans and specifications of any building, fixtures or machinery destroyed or damaged.[6]

These "descriptions and schedules" are required to assist the company in identifying the property destroyed and in estimating the value of such property. In many cases they save the time that would otherwise be necessary to examine the property itself.

> The insured as often as may be reasonably required shall exhibit to any persons designated by this company all that remains of any property herein described and submit to examinations under oath by any person named by this company and subscribe the same.[7]

This provision enables the company to protect itself against fraud or the illegal appropriation of any of the goods insured. For the same reason the insured:

> as often as may be reasonably required, shall produce for examination all books of account, bills, invoices and other vouchers, or certified copies thereof if originals be lost, at such reasonable time and place as may be designated by this company or its representative, and shall permit extracts and copies thereof to be made.[8]

---

and California policies contain no such provision. The Ontario form requires proof of loss "in case of the absence of the insured and his inability to make the same . . . or if the insured refuses to do so, by a person to whom any part of the insurance money is payable."

[6] The California and New York 1918 forms are substantially the same. The New York 1886 form does not mention "verified plans and specifications." The Massachusetts provisions were quoted in footnote 4 and contained no such requirement. The Texas and Iowa policies also contain no such provision. Ontario requires only amounts and names of other insurance, as quoted in footnote 4.

[7] The New York 1918, Iowa, Texas, California, and New York 1886 policies are the same as the New York 1943 policy, except that the California and 1886 policies omit the word "reasonable." This provision is not found in the Massachusetts form. The Ontario form provides that "After any loss or damage to insured property, the insurer shall have an immediate right of access and entry by accredited agents sufficient to enable them to survey and examine the property, and to make an estimate of the loss or damage, and, after the insured has secured the property, a further right of access and entry sufficient to enable them to make appraisement or particular estimate of the loss or damage." The provision, "submit to examinations under oath by any person named by this company and subscribe the same," is identical in all policies except those of Massachusetts and Ontario, where it is not mentioned.

[8] The 1944 Texas and New York 1918 forms are identical with the New York 1943 policy, and the New York 1886, California, and Massachusetts forms are very similar. The New York 1886 and California forms do not qualify the word "required" by "reasonably," the New York 1886 and Iowa forms do not specify a reasonable "time," and the California form does not specify a reasonable "time and place." The Massachusetts form reads: "The company may also examine the books of account and vouchers of the insured, and make extracts from the same." The Ontario

The time and place of examination of the insured and of his books and papers must be reasonable. The place of the fire has been held to be a reasonable place.

As explained previously, the agent must be particularly careful not to prejudice the rights of the company by (a) admitting liability, or (b) waiving some of the policy requirements. It has been held that a forfeiture of the policy, known by the company, was waived by requiring the insured to submit to examination or to furnish proofs of loss, and denial of liability has often been held to waive proofs of loss.[9]

Adjustment of losses. When a notice of loss is received, the insurance company makes arrangements to settle the loss by assigning to it a representative with considerable authority. The agencies employed in the adjustment of losses are:

(1) Local agents, who are often permitted to adjust small losses. A criticism of this practice is that persons engaged in soliciting business should not also be employed to adjust losses, on the ground that one duty is influenced by the other. On the other hand, the local agent probably knows the insured and the subject matter insured better than a strange investigator.

(2) Special agents and state agents, who combine adjusting with other duties that have been mentioned previously.

(3) Company adjusters, employed at this type of work exclusively, usually by individual companies on a salary basis, but sometimes by a group of companies.

(4) Independent adjusters, who will represent any company, usually being employed by the day or hour, but sometimes on a fee basis.

(5) Adjustment bureaus, which are separate corporations formed and patronized by groups of companies, and furnishing for a fee complete adjustment machinery anywhere within a given territory.

Companies have tried to promote co-operation in adjusting losses (a) by organizing and financing "adjustment bureaus," (b) by forming loss committees in underwriters' associations, and (c) by encouraging the voluntary co-operation of adjusters at the scene of a loss. The adjustment bureaus utilize the services of their own, company, or independent adjusters. Examples are: the Fire Companies' Adjustment Bureau, Inc., which operates over nearly the entire country through branch offices; Western Adjustment and Inspection Company, covering about 13 states; Pacific Coast Adjustment Bureau, with over 100 member companies and

---

form requires that "books of account, warehouse receipts and stock lists" and "invoices and other vouchers verified by statutory declaration" be produced "if required and if practicable." The word "required" is not qualified by "reasonably" and a "reasonable time and place" are not mentioned, but the qualification, "if practicable," is used.

[9] The New York 1886 form is the only one containing the requirement, "shall also, if required, furnish a certificate of the magistrate or notary public (not interested in the claim as a creditor or otherwise, nor related to the insured) living nearest the place of fire, stating that he has examined the circumstances and believes the insured has honestly sustained loss to the amount that such magistrate or notary public shall certify." Compliance has seldom been demanded by the companies, but when demanded has been enforced by the courts.

operating in eight states, and the Mutual Fire Prevention Bureau, composed of ten member companies.

Loss committees of underwriters' associations endeavor to obtain the consent of companies to assign approved adjusters automatically to losses that involve three or more companies, thus avoiding duplication of effort. An illustration is the Loss Committee of the New York Board of Fire Underwriters.

Public adjusters are persons who are hired by the insured on the theory that a trained person is desirable to represent the insured in dealing with the specialists employed by the companies. In few states, however, is there satisfactory state regulation of the persons engaging in this occupation. Only about one third of the states make any effort to regulate adjusters, other than to tax them, and only a few of these states require an examination for a license. The law of New York (Sect. 123) defines a public adjuster as anyone who, for compensation, aids an insured in negotiating the settlement of a claim, excluding representatives of insurance companies and brokers who act for the insured without additional compensation. Company adjusters and brokers may not advertise as being public adjusters. Public adjusters are licensed by the superintendent of insurance upon application and examination, and their licenses may be revoked for cause.

The services of adjusters may be enumerated as follows: (a) furnishing prompt aid and advice following a fire, for an adjuster usually arrives very promptly after the loss; (b) aid in preventing further damage; (c) examination of policies and explanation of contract terms to the insured; (d) aid in securing promptness of settlement by supplying information and assistance on repairs, replacements, engineering service, salvage, and the like; (e) appraisal of values; (f) assistance in making inventories, securing expert opinions, and preparing necessary documents. Satisfactory service by agents and brokers in writing policies, of course, promotes satisfactory adjustments.

One of the problems of loss adjustment is that of realizing as much as possible upon damaged goods. The companies have therefore combined to establish "salvage companies," which repair, renovate, recondition, and sell damaged goods. Examples are the Underwriters Salvage Company of New York, comprising 70 stock companies and operating in 28 states, and the Underwriters Salvage Company of Chicago.

The figures available indicate that the expenses of adjusting losses are about 3 or 3½ per cent of the losses, with small losses costing three or four times this much. Appraisers, experts, and lawyers consume more than the adjusters.

Fire loss adjustments involve one or more of the following property items:

(1) Buildings. In view of the variety of decisions on the valuation of buildings, sometimes influenced by the character of the evidence or lack of evidence introduced in the case, any comprehensive rule is impossible, but the most general practice is to take the cost of a new building of the same character and deduct depreciation for age, use, and obsolescence.

(2) Personal property, either (a) for use, such as furniture, fixtures, machinery, equipment, supplies and other property intended for consumption rather than sale, or (b) for sale, i.e., stocks of merchandise. A common practice is to take the cost less depreciation for the former, although it would seem that appreciation should be considered when pertinent. For the latter class of goods, stock intended for sale, the replacement cost is generally used as a basis, although when time is required for replacement or when the goods are staple articles with a continuous market, market price is often used instead.

(3) Use values, such as rents, leasehold values, interrupted net earnings, continuing expenses, extra expense, and the like, which have been discussed previously.

Adjustment of book losses. When the amount of the loss on goods cannot be satisfactorily arrived at by examination, appraisal, market values, salvage basis, and so forth, the loss may be estimated from the accounts. This is often a difficult matter, involving expert accounting and considerable calculation, but the idea may be illustrated by simplified figures. The method consists of ascertaining what the books show would have been on hand at the time of the fire and subtracting the value of what is saved, as shown by the calculation below:

Merchandise inventory, beginning of year, cost	$55,000	
Merchandise purchased to date of fire	25,000	
		$80,000
Deduct:		
Sales to date of fire	30,000	
Less profit, 16⅔% of sales*	5,000	
	$25,000	
Merchandise saved	40,000	
		65,000
Amount destroyed		$15,000
Plus freight and charges at 5%		750
Net loss		$15,750

* Estimated profit percentage.

Inventory, January 1 of preceding year	$ 50,000
Purchases during preceding year	150,000
	$200,000
Inventory, December 31 of preceding year	55,000
Cost of merchandise sold during year	$145,000
Sales, as per sales book	174,000
Profit (20% of cost; 16⅔% of sales)	$29,000

3. Agreement and appraisal. The foregoing section has indicated what the insured is required to do after a loss occurs. When the insured has complied with these requirements, he and the representative of the company must endeavor to settle upon the amount to which the insured is entitled.

It is to be noted that if the two parties agree, the policy provides that "the amount of loss for which this Company may be liable shall be payable sixty days after proof of loss, as herein provided, is received by this

Company and ascertainment of the loss is made either by agreement between the insured and this Company expressed in writing or by the filing with this Company of an award as herein provided." [10]

As previously stated, the insured cannot under a fire policy abandon the property and claim the full amount of insurance. If the parties cannot agree upon the amount of loss or damage, an appraisal is necessary, as provided for in the policy.

The New York 1943 policy reads:

> In case the insured and this company shall fail to agree as to the actual cash value or the amount of loss, then, on the written demand of either, each shall select a competent and disinterested appraiser and notify the other of the appraiser selected within twenty days of such demand. The appraisers shall first select a competent and disinterested umpire; and failing for fifteen days to agree upon such umpire, then, on request of the insured or this company such umpire shall be selected by a judge of a court of record in the state in which the property covered is located. The appraisers shall then appraise the loss, stating separately actual cash value and loss to each item; and, failing to agree, shall submit their differences, only, to the umpire. An award in writing, so itemized, of any two when filed with this company shall determine the amount of actual cash value and loss. Each appraiser shall be paid by the party selecting him and the expenses of appraisal and umpire shall be paid by the parties equally.[11]

The demand for appraisal can not be made until the insured has submitted the claim to the insurance company and the company has had an opportunity to make an offer of settlement. Either party may then re-

[10] The New York 1886, New York 1918, Texas 1944, and California policies are substantially the same as the New York 1943 policy, except that the latter two allow only 30 days. The Massachusetts form provides that the company shall, within 60 days after the insured has submitted a statement, "either pay the amount for which it shall be liable, which amount, if not agreed upon, shall be ascertained by award of referee or . . ." exercise its options as previously discussed. The Ontario form provides that "the loss shall be payable within 60 days after completion of the proofs of loss unless the contract provides for a shorter period."

[11] The New York 1886 policy does not specify that the demand must be in *writing*, nor provide for selection of an umpire by a *court*, nor specify that only *differences* shall be submitted to the umpire, nor require an award on *each item*. In California the *company* must demand the appraisal, and the insured must name his appraiser within five days from demand. The appraisers *together* shall determine the sound value and damage on *each item*. The California policy contains no provision for the selection of the umpire by a judge. The Massachusetts form requires each party to *select* one referee from three named by the other party, these two to select a third, and the award in writing of a majority is conclusive.

The Ontario form provides that disputes between the company and the insured as to value and amount, but "independently of all other questions," shall be submitted to the "arbitration" of some person (or three as in the New York policy if they can not agree upon one). Procedure is to be as provided in The Arbitration Act. The Texas 1944 policy is like the New York 1943 policy except that upon selection of appraisers "each shall notify the other of the appraiser selected within twenty days of such demand," and the judge is the "judge of a district court of a judicial district where the loss occurred." The Iowa policy contains no arbitration provision.

quire an appraisal. The courts of nearly every state have held that if either party requests an appraisal, one must be had before a suit can be maintained and a recovery obtained upon the policy. In Pennsylvania and Nebraska, however, this agreement is held to be revocable by either party, and the bringing of a suit constitutes such revocation. As to whether an appraisal may be required in case of a total loss the court decisions differ, except in states where valued policy laws exist.

The appraisal is not a complete "arbitration" (which would settle all disputed questions) but merely an arbitration of differences concerning the amount of the loss. Whether or not the company has any liability under the policy is not determined by appraisal; in fact in several cases a policy provision to that effect was held to be void because it deprived the courts of their proper jurisdiction. The appraisal is concerned mainly with matters of fact and not with establishing general principles upon which the loss should be settled, e.g., whether market values or cost of reproduction should be used. Thus neither party can demand an appraisal upon the condition that a particular process be followed.

When the award has been made and filed with the company, it determines the *amount* of loss, and the parties are bound by the conclusion. The only exceptions occur (a) when fraud is involved; (b) when appraisers are incompetent or not disinterested; or (c) when the loss is total and a valued policy law exists. If the mortgagee participates in the appraisal or ratifies it, he is also bound, but the company and the owner cannot themselves make an agreement that is binding upon him.

Suits. If the question of the liability of the company is involved, the case may be brought into court regardless of the action of appraisers. The New York 1943 policy provides that:

> No suit or action on this policy for the recovery of any claim shall be sustainable in any court of law or equity unless all the requirements of this policy shall have been complied with, and unless commenced within twelve months next after inception of the loss.[12]

The object is to prevent unreasonable delay upon the part of either the company or the insured, which may make the determination of the rights of the parties more difficult. In general this provision has been held binding by the courts if no specific statute to the contrary exists, but in states where statutes provide a longer period, the provision is void.

4. Net payment of the company. The next question, after liability

[12] In Iowa, it will be noted, there is no provision for appraisal in the policy. The New York 1886 and New York 1918 policies are substantially the same as the New York 1943 policy. The Iowa policy provides that the suit must be within 12 months "next after the *right of action* for the loss accrues." Texas provides: "within two years next after cause of action accrues." The California form confines suits to "within 15 months after the *commencement of the fire*." The Ontario form says that suit is "absolutely barred unless commenced within one year next after the loss or damage occurs." The Massachusetts form requires suit "within two years from the time the loss occurred," but the limitation of time for bringing suit "shall in no event be less than 90 days after a valid (arbitration) award has been made" or waived.

of the company has been determined, is that of determining the net amount of money for which the company is liable.

Repair or take the property. Lines 141 to 147 of the policy state:

> It shall be optional with this company to take all or any part, of the property at the agreed or appraised value, and also to repair, rebuild or replace the property destroyed or damaged with other of like kind and quality within a reasonable time, on giving notice of its intention to do so within thirty days after the receipt of the proof of loss herein required.[13]

If the company avails itself of this contract right, obviously the net payment made by the company would be the amount paid for the property, or part of the property, less the realizable value of the property; or the cost to the company of repairing, rebuilding, or replacing.

Subrogation. It is a settled principle of law, which has also been incorporated in all policies, that the insurance company, upon payment of the loss to the insured, is entitled to his legal, equitable, and (perhaps) contractual rights against third parties.[14]

The rights referred to, of course, are only those related to the loss, and the company is entitled only to the extent of the loss payment. This principle has already been explained in a previous chapter (pp. 371-373). If these rights can be exercised by the insurance company so as to produce a recovery from a third party, as, for instance, when a damage claim or suit for negligence is successfully prosecuted, the net loss to the insurance company is reduced thereby.

Another instance of subrogation, and the most frequent one, arises when an insurance company pays a loss to an insured mortgagee and, if it has no liability to the mortgagor, acquires the mortgagee's right to collect the debt. Such an instance occurs (a) when the mortgagee is insured under his own policy and (b) when the mortgagee is insured under a mortgagee clause but the policy is void as to the mortgagor, because of his violation of some policy provision.

The company may settle with the mortgagee by (a) paying the loss and being subrogated to the debt to that extent, or (b) paying the entire debt and acquiring the whole mortgage. In either case the company's net payment on the loss is diminished by the subrogation process. When the policy of the mortgagor is valid, subrogation to the claim of the mortgagee also occurs, but results in no diminution of the net loss to the company because the mortgage is canceled to the extent of the loss. Numerous illustrations of the subrogation principle have already been given in Chapter 18.

Subrogation also arises if different mortgagees on the same property are insured in different companies, but this situation merely extends the same principle to a more complicated case, the complication arising from the pro rata liability of the companies.

---

[13] Policies of other states were described in the notes of Chapter 21.

[14] The wordings of the various policies were discussed in the preceding chapter.

Pro rata liability. In many cases the insured has several policies covering the same interest in the same property. In case of a large risk, in fact, he is often compelled to seek several companies in order to secure the total amount of protection desired. To cover this situation the New York 1943 policy provides:

> This company shall not be liable for a greater proportion of any loss than the amount hereby insured shall bear to the whole insurance covering the property against the peril involved, whether collectible or not.[15]

Applying this provision to a specific case, assume that company *A* insures a $50,000 property for $30,000, and company *B* insures the same property for $10,000. A loss of $4,000 occurs. The pro rata liability provision of the contract makes *A* liable for the proportion that its insurance ($30,000) bears to the total insurance ($40,000), or three fourths of the loss. Company *B* is liable for the proportion that its insurance ($10,000) bears to the total insurance ($40,000), or one fourth of the loss.

The words "valid or not" and "collectible or not" in the policy provision are far-reaching. Under the first expression, if the insured with two policies has violated one and it is therefore "invalid," its amount is nevertheless considered as part of the whole insurance and thus reduces the amount that would otherwise be collected from the other policy. Under the second expression, the same is true if the property is covered by two policies, one in a company that proves to be insolvent. The object of the second expression is to prevent one company from being placed in the position of partially guaranteeing the insurance written in other companies. In 1939 a proposed revision of the New York policy planned to remove both of these expressions, but "collectible or not" was finally retained. The Iowa policy, on the other hand, includes in the total only valid and collectible insurance.

[15] The New York 1918 policy is the same with the addition of the words "whether valid or not." The New York 1886 and California forms mention also "loss by and expense of removal from premises endangered by fire," and use the words, "solvent or insolvent insurers," instead of "collectible or not." The Massachusetts policy is, in slightly different words, equivalent to the New York 1943 policy, with, however, no mention of solvent or insolvent insurers, collectible or uncollectible policies, valid or invalid insurance. The Ontario form makes the insurer liable for a "rateable proportion of such amounts as the insured shall be entitled to recover under clause (a) of this condition." Clause (a) provides that the insured is entitled to only 60 per cent of the loss if there is "undisclosed" other insurance. The Iowa policy is the same as the New York 1886 policy, including the loss by and expense of removal, but incorporating the unusual provision that the proportion for which the company is liable is that which the "amount hereby insured shall bear to the whole amount of *valid and collectible* insurance covering such property." In the Texas policy, the denominator of the fraction is the "whole insurance covering the property against the peril involved," "whether collectible or not," but "if any article or piece of personal property covered hereunder by a general item (i.e., one covering several articles) is insured specifically (without an excess provision) under this, or any other policy, then such general item shall apply as excess over the specific insurance and pay only for any actual loss sustained over the amount of specific insurance." The significance of this provision will be appreciated after a study of the next section of this book.

Apportionment. When the policies issued by different companies are concurrent, that is to say, when all the provisions of the policies are identical, the only problem is how much shall each pay, the amount of insurance applicable to the loss being known. But there are some cases in which the policies differ and it becomes a difficult matter to determine the amount of the total insurance or the insurance on each item. The policies, be it noted, supply no rule for settling such cases, with the one exception of the Texas 1944 policy. "Apportionment" refers to the manner in which blanket or general insurance is spread over the individual items it covers.

The policies may differ because the properties covered are in different locations, because the descriptions of the insured articles vary, because the interests covered are not identical, or because one policy contains clauses or endorsements not on the other. This is a situation to be avoided by both the insured and the company because it results in delay in the payment of losses and frequently involves complicated law cases. The methods employed to prevent such a situation, but without entire success, are (a) to instruct agents to make policies agree, examining prior policies for that purpose if necessary; (b) to change the terms of policies found to be nonconcurrent; (c) to cancel policies that appear likely to cause serious difficulty; (d) to have all policies approved by a central stamping department; (e) to print on policies the warning, "It is important that the written portions of all policies covering the same property read exactly alike. If they do not they should be made uniform at once."

Two situations are commonly met with: (a) that in which specific policies and blanket (or general) policies exist on the same items of property; (b) that in which certain policies contain coinsurance clauses and others do not. The methods applied in these situations will serve as a guide in other cases involving two or more locations, three-quarter value clauses, and the like.

Cases of nonconcurrency may be divided into two main classes: (1) simple nonconcurrence and (2) compound nonconcurrence. The rules to be applied to the first are fairly well established. The second furnishes problems so complicated and debatable that the courts cannot agree. Some "rules" have derived importance from their application in leading cases; others have derived it from consistent application by adjusters.[16] The most common type of case is that in which one policy is a specific policy covering one item, and another policy is a general policy covering many items, including the one covered by the specific policy.

1. Cases in which limiting clause is not involved. The situations to be

[16] Among the rules that do not contemplate the existence of limiting clauses such as the coinsurance clause are the (1) Page Rule, (2) Cromie (Meigs) Rule, (3) Albany (Canadian) Rule, (4) Reading (Massachusetts or Blake) Rule, with two modifications, (5) Finn Rule, (6) Griswold Rule, (7) Kinne Rule, which is an extension of (5) and (6), (8) Rice Rule, (9) Gradual Reduction Rule, in the Connecticut, Chicago, and Western variations, and (10) Wisconsin Rule. Among the rules that contemplate the coinsurance clause are (1) Giesse Rule, (2) Morristown Rule and (3) Limit of Liability Rule. One or two of the first group will work fairly well under coinsurance conditions, although not designed for that purpose. Rules (3), (5), (6), (8) in the first group and Rules (1) and (2) in the second group are virtually obsolete. All of the rules have arisen out of actual cases.

considered here are divided into two groups. In the first are included only those in which no coinsurance or other limiting clause is present in any policy involved, or in which, if such a clause is present, it does not reduce the collectible loss on any policy. Among such cases may be found both simple and compound nonconcurrencies. One example of a simple nonconcurrency is as follows: several items are covered by a general policy; one of those items is covered also by specific insurance; the loss is confined to the property covered by the specific policy. It is generally agreed by adjusters and upheld by numerous decisions that the Page Rule should be followed in this case.

PAGE RULE: *The full amount of the general policy contributes with the specific insurance to pay the loss.*

For instance, suppose that an owner has a stock of goods consisting of music valued at $500 and books valued at $3,000. Company *G* had insured both these items under a general policy for $2,000, and Company *S* had insured the books only for $1,000. The loss by fire is entirely of books and amounts to $900. Since the full amount of the *G* (general) policy can apply to books and there is an *S* (specific) policy for $1,000, there is $3,000 insurance, *G* supplying 2/3 and *S* 1/3. *G* must, therefore, pay 2/3 of the loss, or $600, and *S* 1/3, or $300.[17]

Another example of simple nonconcurrency is as follows: two items are covered by a general policy; one of those items is covered also by specific insurance; there are losses on both items. It is generally agreed that in this case the Cromie Rule should be applied.

CROMIE RULE: *The general policy must first pay the loss on the item not covered by the specific policy, and then its remainder contributes with the specific policy toward the loss on the other item.*

The facts used in the problem above will serve to illustrate this case, if it is now assumed that there is a loss of $900 on books and also $300 on music. The *G* policy must first pay the loss on music, namely $300. This step leaves $1,700 of the *G* policy to contribute with the *S* policy for $1,000 on books, a total of $2,700 insurance. The *G* policy must, therefore, bear 17/27 of the $900 loss, or $567, and the *S* policy 10/27, or $333.

Compound nonconcurrency exists where two or more items are covered by specific insurance and such property is also within the scope of the general policy. Such cases have caused endless discussion and no rule is universally acknowledged, but the Kinne Rule has received more approval than any other.

KINNE RULE: *The general policy is divided among the specific items in the proportions of the respective losses thereon.*

The steps are: (1) Classify the items into as many groups as the non-

[17] It is interesting to note that the Texas 1944 policy, the only one referring to this situation in any way, is in direct opposition to the Page and Cromie rules. The Texas provision is quoted on a previous page of this chapter. According to it, the specific policy must first pay the loss on the specific item to its full capacity before the general policy becomes liable as excess insurance on the specific item. This ruling penalizes the specific policy instead of the general policy. Confusion is increased by the fact that the Texas provision applies only to "any article or piece of *personal* property."

TABLE 33

OPERATION OF THE KINNE RULE

Item	*Value*	*Insurance*	*Loss*
Music	$5000	*C* $2500 } *A* $4500 } *B* $6000	$3500
Books	6000	*C* 3000 }	4500
Stationery	9000	*D* 1680 }	7000
	$20000	$17,680	$15000

APPORTIONMENT OF INSURANCE

Music		*Books*		*Stationery*	
A	$\frac{85}{150} \times \$4500 = \$1050$	*A*	$\frac{45}{150} \times \$4500 = \$1350$	*A*	$\frac{70}{150} \times \$4500 = \$2100$
B	$\frac{85}{150} \times \$6000 = 1400$	*B*	$\frac{45}{150} \times \$6000 = 1800$	*B*	$\frac{70}{150} \times \$6000 = 2800$
C	2500	*C*	3000	*D*	1680
	$4950		$6150	Insurance	$6580
				Deficit	420
				Loss	$7000

REAPPORTIONMENT OF INSURANCE

The deficit must be taken from the general policies A *and* B.

From *A*: $\frac{4500}{10800} \times \$420 = \$180$ { *music* $\frac{85}{80} \times 180 = \$ 78.75$; *books* $\frac{45}{80} \times 180 = 101.25$

From *B*: $\frac{6000}{10800} \times \$420 = \$240$ { *music* $\frac{85}{80} \times 240 = \$105.00$; *books* $\frac{45}{80} \times 240 = 135.00$

Music		*Books*		*Stationery*	
A	$1050 − 78.75 = $ 971.25	*A*	$1350 − 101.25 = $1248.75	*A*	$2100 + 180 = $2280.00
B	$1400 − 105.00 = 1295.00	*B*	$1800 − 135.00 = 1665.00	*B*	$2800 + 240 = 3040.00
C	2500.00	*C*	3000.00	*D*	1680.00
	$4766.25		$5913.75		$7000.00

CONTRIBUTION OF EACH POLICY

Each policy pays under each item in the proportion that its insurance on that item bears to the total insurance on that item.

Policy	*Music* (*loss $3500*)		*Books* (*loss $4500*)		*Stationery* (*loss $7000*)	
	Insures	*Pays*	*Insures*	*Pays*	*Insures*	*Pays*
A	$971.25	$713.22	$1248.75	$950.22	$2280.00	$2280.00
B	1295.00	950.96	1665.00	1266.96	3040.00	3040.00
C	2500.00	1835.82	3000.00	2282.82		
D					1680.00	1680.00
	$4766.25	$3500.00	$5913.75	$4500.00	$7000.00	$7000.00

concurrency requires. (2) Ascertain the loss on each group of items separately. (3) If only one group has a loss, all policies contribute pro rata. (4) If more than one group has a loss and the loss on one or more groups is greater than the total insurance thereon, the whole amounts of insurance apply to the losses on such groups. (5) If more than one group has a loss and the insurance is more than the loss, apportion the amounts of the general policies among the groups *in proportion to the losses thereon.* (6) If this apportionment does not provide enough insurance to cover the loss of any group, let the deficit be covered by the general policies in the proportion that each general policy is to all the general policies and let each general policy's contribution for this purpose be taken from each item with a surplus in the proportion that that item's loss is to the total losses of all items with a surplus. (7) If new deficits are created by step (6) repeat step (6). (8) When the insurance on each group is sufficient for the loss on that group, let each policy contribute to pay the loss in the proportion that its insurance on that group is to the total insurance on that group.

In the case illustrated in Table 33 on the opposite page there are two general policies, *A* and *B*, and two specific policies, *C* and *D*. The procedure is clear from the example. Only one reapportionment is required, but had others been necessary the process could have been repeated.

2. Cases in which limiting clauses are involved. There is a second group of cases of nonconcurrency, in which several or all of the policies contain a coinsurance or other limiting clause that reduces the liability below the face of the policy. There is no agreement on the solution of such cases, but the Giesse, Morristown, and Limit of Liability Rules may be used. The last named has been recommended by the National Board of Fire Underwriters and numerous adjusters.

LIMIT OF LIABILITY RULE: *The limit of liability on each policy is determined by applying the coinsurance or other limiting clause. If the total of the limits is less than the total loss, each company must pay its maximum individual limit. If the total of the limits is more than the total loss, each company is liable in proportion as its limit is to the total of all the limits. If the insurance, blanket and specific, on any certain item or group of items is charged with a payment in excess of the actual loss on the group, this excess must be reapportioned to the other groups, deducting it pro rata from one group and adding it to another group.*

In the following illustration the policies have 80 and 90 per cent coinsurance clauses (indicated as .80 and .90). Policy *D* is a general policy covering all items, and Policy *E* is a general policy covering stock and machinery. Policies *A*, *B*, and *C* are specific policies, each covering one item only. The table on page 464 shows the first tentative apportionment of losses among the five policies.

But the loss on (B)uilding is $14,400, whereas policies *A* and *D* are charged with only $12,610.64, a deficit of $1,789.36. On the other hand, the loss on (S)tock and (M)achinery combined is $15,680, whereas policies *B*, *C*, and *E* are charged with $17,469.36, an excess of $1,789.36.

	Value	*Insurance*		*Limits*	*Loss*	*Liability*
(B)uilding...	$34,000	*A* (.90) on (B)	$17,000	$8,000*	$14,400	$6,029.11†
(S)tock.....	8,000	*B* (.80) on (S)	3,000	3,000**	7,680	2,260.92
(M)achinery	20,000	*C* (.80) on (M)	9,000	4,500	8,000	3,391.38
		E (.90) on (S) & (M)	28,000	15,680¶	as above	11,817.06
		D (.90) on (B), (S) & (M)	16,200	8,733‡	as above	6,581.53
	$62,000		$73,200	$39,913	$30,080	$30,080.00

* 17,000/(.90 × 34,000) × 14,400 = 8,000 (as explained on page 397).
** Face value is the limit.
¶ Loss is the limit.
‡ Slightly rounded off.
† That proportion of the total loss (30,080) which the limit 8,000 is to the total limits of 39,913.

This excess is to be taken pro rata from the latter three policies and given pro rata to the former two policies, resulting in:

	Original Apportionment			*Re-apportionment*
A.....	$6,029.11	+ $855.49	=	$6,884.60
B.....	2,260.92	− 231.58	=	2,029.34
C.....	3,391.38	− 347.37	=	3,044.01
E.....	11,817.06	− 1,210.40	=	10,606.66
D.....	6,581.53	+ 933.87	=	7,515.40
	$30,080.00			$30,080.01

The courts have, in general, followed the principle of fully indemnifying the insured when the insurance is sufficient for that result. Policy provisions are too general to prove the justice of any rule, and the only rule obtainable is one that will give substantially equitable results in a large number of cases.

It is obvious that nonconcurrent policies are to be avoided whenever possible.

Summary

I. Policy provisions dealing with preservation of property
  A. The insured must
    1. Give immediate notice to the company.
    2. Protect the property from further damage.
    3. Separate the damaged and undamaged goods.

II. Policy provisions dealing with estimation of amount of loss
  A. The insured must
    1. Furnish an inventory.
    2. Furnish a proof of loss.
    3. Supply a description of property.
    4. Submit to examination under oath if required.
    5. Submit books of account for examination.
    6. Furnish certificate of notary—in some states.
  B. Adjustment of losses
    1. Made by local agents, special agents, company adjusters, independent adjusters, and adjustment bureaus.
    2. Public adjusters are sometimes employed by insured.
    3. Services of adjusters.
    4. Adjustments may involve
      a. Buildings,
      b. Personal property,
      c. Use values.
    5. Books of account are useful in arriving at amount of loss.

III. Policy provisions dealing with agreement and appraisal
  A. Upon agreement on amount of loss, payment shall be made by company within 60 (or in some states 30) days.
  B. Each party selects an appraiser and the appraisers select an umpire to resolve disagreement.
    1. The appraisal decides only the amount of loss.
  C. Legal actions must be begun within a limited period after the loss.

IV. Policy provisions dealing with amount of net payment by the company
  A. Company may repair, rebuild, replace, or take the property.
  B. Company is subrogated to rights of the insured.
  C. When several companies cover the same interest, each company is liable only in proportion to its insurance.
    1. The insured loses when an insurer is insolvent or a policy is invalid.
  D. When noncurrent policies exist, the loss settlement is complicated
    1. In certain cases of nonconcurrency, policies contain no clauses limiting liability, but do not cover the same items.
    2. In other cases, liability is limited by clauses, and policies do not cover same items.

Readings

Insurance Society of New York, *The Fire Insurance Contract.* Indianapolis: Rough Notes Co., 1922, pp. 275-638.

Daniels, W. H., *Apportionment and Contribution.* Indianapolis: Rough Notes Co., 1904.

Richards, George, "The Doctrine of Subrogation," address to Insurance Society of New York, November 26, 1912.

Hore, W. H., *Apportionment of Fire Losses.* London: Layton, 1911.

Bell, H. S., *Average and Contribution.* London: Layton, 1909.

Laird, J. & J., *Theory and Practice of Fire Loss Apportionments.* Edinburgh: Green, 1909.

Reed, P. B., *Adjustment of Fire Losses.* New York: McGraw-Hill Book Co., N. Y., 1929.

Nelson, O. S., *Fire Loss Adjustment Problems in the United States.* Philadelphia: privately printed, 1930.

Stratton, G. F., "Underwriters Salvage Company." *Eastern Underwriter,* February 7, 1930.

Anonymous, "Underwriters Salvage Company." *Eastern Underwriter,* August 12, 1927.

Anonymous, "The Loss Committee of the New York Board." *Eastern Underwriter,* July 23, 1926.

Hall, T., *Insurance Adjustments.* Indianapolis: Rough Notes Co., 1916.

Problems

1. The Will & Baumer Company's building was destroyed by the San Francisco earthquake and fire. In the confusion after the calamity, the plaintiff was unable to ascertain what property had been destroyed and consequently notified the insurance company of the fire 60 days after the loss. Criticize the Will & Baumer Company's procedure. Can it recover?

2. Farwell submitted proofs of loss ten days after the fire. The company received them and retained them 30 days and then objected that they were not made by the proper person. What is your decision?

3. What is the first thing an insured should do following a fire that damages his insured goods? What is the second thing?

4. Wilson mortgaged his house, worth $20,000, for $18,000. He had a policy of insurance with a mortgagee clause attached for the protection of Martin, the mortgagee. The property was totally destroyed by fire and Wilson, thinking it had depreciated greatly in value, disappeared. What will be done with respect to the proof of loss?

5. Why, in cases of large loss of valuable business property and goods, are accountants sometimes employed?

6. What is done if the insured and the company adjuster cannot agree upon the amount of loss?

7. In an appraisal, the insured's representative and the company's representative could not agree on the amount of loss, and it was therefore agreed that each representative and the umpire should make an estimate and that the three estimates should be averaged. Has the insured any right to object to the result?

8. What exceptions are there to the enforcement of the appraisal provision by the courts?

9. Jamison had a fire on March 1, 1945, and $20,000 of goods were saved from the fire. His books show the following:

Purchases January 1—December 31, 1944	$ 20,000
Purchases January 1—March 1, 1945	100,000
Sales January 1—December 31, 1944....(less expenses)..	200,000
Sales January 1—March 1, 1945.....(less expenses)..	120,000
Merchandise inventory (cost) January 1, 1944	200,000
Merchandise inventory (cost) January 1, 1945	40,000

What is the fire loss?

10. Smith owned a house worth $20,000, which he mortgaged to Brown for $10,000. Smith had a fire insurance policy in the *S* insurance company for $5,000, which made no mention of the mortgagee. Brown had a policy for $10,000, in the *B* insurance company, protecting his interest as mortgagee. A loss of $3,000 occurred. How is this loss borne by the two insurance companies involved?

11. Metz insured his lumber yard against fire in the *M* insurance company. After the policy was issued, he made a contract with the Eastern Railroad Co. for the latter to furnish him with a sidetrack, but the Railroad Co. was not to be responsible for damage resulting from operation of locomotives. A spark from the locomotive set the lumber on fire and there was damage of $12,000. The *M* insurance company refuses to pay the loss. Is it justified?

12. During the war it was alleged that Canadian property was burned by a fire set by a German spy. If, after the war, Germany acknowledges responsibility for the act and pays an indemnity, to whom does the indemnity belong, the insurance company that paid the fire loss or the owner of the property that was burned?

13. Companies *A* and *B* write identical policies on the same stock of goods, *A*'s policy being for $6,000 and *B*'s for $1,000, neither policy prohibiting other insurance. A loss of $700 occurs, and Company *A* is discovered to be insolvent. What is *B*'s liability on this loss?

14. Jones owned a stock of groceries worth $6,000 and a stock of hardware worth $6,000. Company *A* insured the groceries and hardware for $4,000, and Company *B* insured the hardware only for $3,000. Neither policy had any endorsements limiting liability. What is the liability of Company *A* and Company *B* under the following circumstances:

(a) Loss of $5,600 on hardware, no damage to groceries.
(b) Loss of $5,000 on hardware, and $1,000 on groceries.

15. Brown has a stock valued and insured under specific policies as follows:

	Value	*Insurance*	*Company*
Corn.....	$5000	$1000	*C*
Feed.....	3000	2000	*D*
Hay.....	2000	2000	*E*

He has also a general policy in Company *G* covering corn, feed, and hay for $4,000. All these policies permit other insurance and none contains any limiting clause on liability. A loss occurs of $4,000 on corn, $2,000 on feed and $2,000 on hay. Show the application of the Kinne rule to this problem.

16. Green has a stock of furniture worth $8,000, a stock of hardware worth $4,000, and a stock of drygoods worth $6,000. Company *A* insures furniture and hardware for $4,900; Company *B* insures hardware for $2,000; and Company *C* insures hardware and drygoods for $3,000. The losses are $6,000 on furniture, $1,000 on hardware, and $1,000 on drygoods. Show the application of the Kinne rule to this problem. Does the insured recover his full loss? Has he enough insurance to cover the loss?

17. White owned a stock consisting of books valued at $3,000 and stationery valued at $2,000. Books were insured under a specific policy with an 80 per cent coinsurance clause for $2,000 by Company *A*. Stationery was insured under a specific policy with an 80 per cent coinsurance clause for $1,000 by Company *B*. Both were insured under a general policy with a 90 per cent coinsurance clause for $1,000 by Company *G*. There was a loss of $1,800 on books and $1,800 on stationery. Show the application to this problem of the Limit of Liability rule.

18. Apply the Cromie rule to the problem on page 462 and show that, although the insured has more insurance than amount of loss, he will not recover in full. Consider policies A, B, and C as general policies, paying on music loss; then remainder of A, B, and C as general policies paying on book loss; then A, B, and D paying on stationery loss.

CHAPTER 23

Fire Insurance Rates

Nature of fire insurance rates. Fire insurance premiums, in the aggregate, must be sufficient to cover (1) losses, (2) expenses of conducting business, and (3) (in stock companies) a fair profit to stockholders. From published figures[1] an estimate may be made of the required fire insurance premium on a national annual basis, as follows:

Losses and loss expenses incurred	$360,691,000
Underwriting expenses	376,550,000
Profit	30,382,000
Total expenditures	$767,623,000
Insurance Written	$117,623,000,000

$$\text{Necessary premium per \$100 insurance} = \frac{\text{Total Expenditures}}{\text{Insurance Written}} \times \$100 = \$0.65$$

The premiums actually written were $799,834,000 and the premiums earned were $767,583,000, which is a premium per $100 of insurance written of $0.65, the same figure indicated by the losses and expenses. From this illustration, in which the figures are admittedly crude for ratemaking purposes and cover but one year's operations, it may be seen that (1) an average national premium on all classes of business can be calculated from the loss and expense statistics; (2) such a calculation does not indicate that fire insurance premiums in the aggregate are exorbitant, for the profit element in it is only 4 per cent of premiums earned;[2] (3) this is a grand, over-all calculation, lumping together all the states of the Union and all kinds of contents in all kinds of buildings, industrial, mercantile, and residential.

But much more is demanded of a business than that its aggregate income should be reasonable as compared with its expenditures. It should charge prices that are equitable among its customers, not overcharging one group to make up for undercharging another. This problem is difficult enough for an industrial concern making 50 different articles and knowing its costs before it sells, but for a fire insurance company, assuming a different degree of risk on every property written, and selling pro-

[1] This calculation is based upon combined figures for 339 stock companies in Best's *Fire and Casualty Aggregates and Averages, 1940.* New York: A. M. Best Co., 1940.

[2] In 1921 the state insurance commissioners and the National Board of Fire Underwriters agreed that a reasonable underwriting profit is not less than 5 per cent of premiums plus 3 per cent additional for conflagration fund.

tection before it knows the cost thereof, the problem is immeasurably more difficult.

Not only is the risk of fire loss different from year to year, but it varies with different geographical districts, with different classes of risks, and even with every individual risk. The losses paid to insurance written in 1939 were $.34 per $100 on the average, but as high as $.61 in Arkansas and as low as $.20 in South Dakota. In one state the ratio of losses paid to insurance written on one classification of risks was about $2.30 per $100, and on another classification in the same year in the same state it was only $0.25 per $100.[3]

As for individual risks it is commonplace to say that no two are alike. The variation is evident when one considers the different kinds of construction, the material used, the exposure to surrounding buildings, the character of fire protection, its availability, the infinite variety of contents in buildings, the multitude of industrial operations that may be conducted, the character and carefulness of tenants, and so on.

Possible methods of ratemaking. The problem in fire insurance rating is to make rates that are equitable as to (1) different periods of time, (2) different geographical districts, (3) different classes of risks, and (4) different individual risks. Only two distinctive methods of meeting the problem have ever been seriously considered, and only one has ever been used. The first is to rely upon aggregate results (such as used to introduce this chapter) to produce a reasonable total premium and to try to estimate by judgment the relative influence of the different individual characteristics that produce losses. This is the method used, one which the business just naturally "grew into." The second is to classify the experience of carriers on different types of risks and base rates on classified statistics of past experience. This statistical method has never received an adequate trial.

The former method results in estimates of the relative importance of individual factors of hazard which cannot be proved correct by statistical data. Although a schedule may provide in bold print a charge of $.03 for each story of height in a building and $.07 for a wood shingled roof on a light manufacturing risk, no one can produce any statistics to show that the latter risk is twice as hazardous as the former. The objection to the statistical method of ratemaking, on the other hand, is the difficulty of arranging a workable classification adequate to cover geographical districts that are distinctive in climate, race, building construction, and types of industry, and adequate to cover an almost infinite number of possible combinations of building construction features, household and industrial processes, and stocks of goods and occupancies.

Types of rates under present methods. It is the almost universal rule to promulgate (1) class rates, (2) minimum rates, and (3) schedule rates. The terms, "class rates" and "minimum rates," are often used interchangeably.

---

[3] The classifications were, respectively, (a) mercantile stocks, household furniture in mercantile buildings and contents of offices and banks, and (b) public buildings, hospitals, museums, and the like.

1. Class rates. Class rates apply to risks that are so similar in character that it seems an unnecessary expense to differentiate among them as to varying factors of hazard. Such rates are usually applied to dwellings, churches, small apartments, farms, clubs, schools, and sometimes small mercantile and special risks. In each class the risks are of substantially the same general character, and minor differences are ignored for the sake of economy. Dwellings are universally class-rated, all in a given city or rating territory being charged, for example, $.10 per $100 insurance. In addition, they are usually granted term rates, for example, 3 years' protection for 2½ annual premiums. Sometimes the class rate is modified for some important factor of hazard, e.g., by imposing an extra charge for shingle roofs or frame construction.

Such risks make up about 80 per cent of the number of insurable risks in a large city and an even higher proportion in rural districts. They are, however, mostly small risks and therefore produce probably not more than 25 per cent of the premiums. In New York state, 40 per cent of the fire premiums are from dwellings.[4]

2. Minimum rates. This name is frequently applied to the class rates described above, but also in some jurisdictions to a list of rates on miscellaneous properties not sufficiently numerous to constitute a class and not subject to schedule rating. When schedule rating is applied to one of these risks it loses its minimum rate; until that time it may be written at not less than the rate specified in the minimum rate book.

3. Schedule rates. Schedule rates are the results of surveys of individual risks: the charges and credits are based upon the surveys. The charges and credits are defined in a "schedule" and are the same for all risks under the particular schedule. Different schedules are used for different kinds of risks. There are schedules for fireproof mercantile establishments, nonfireproof mercantile establishments, grain elevators, lumber yards, theatres, hotels, light manufacturing, and so forth.

These risks are only about 20 per cent of the total *number* of risks but are very important because (a) they produce a large premium volume and (b) insurance premiums are an important factor in competitive industrial and mercantile costs.

Although class rates and minimum rates are fundamentally "judgment" rates, and although the debits and credits in the schedules are mere estimates, results may be checked to some extent by such classified loss statistics as are kept by the companies. For example, the premiums received and losses paid on dwellings may be kept account of, and if the losses exceed the receipts, the need for higher rates is shown. In some states the insurance department requires companies to report experience on certain categories of risks, a uniform classification system being prescribed for this purpose. These classifications are much too crude to be useful for making rates and furnish only a rough guide to results.

So-called "classified" experience. Since 1870 and earlier, most companies have kept some record of their experience on groups of risks.

[4] W. J. Ward, "Rating Simplification." *Proceedings, 66th Annual Meeting, Fire Underwriters' Association of the Pacific,* 1941.

When there were only eight or ten different rates used, the classified experience groups corresponded with the rate groups. With the growing complexity of industrial life, the rates quoted multiplied indefinitely, and it was physically impossible for the "classifications" to keep pace. Each classification therefore contained a group of risks, very loosely defined, whose only common characteristic might be the nature of contents, distinctive building construction feature, or nature of private fire protection.

To bring about uniformity among company classifications, various "standard classifications" were drawn up and proposed for general use from time to time, but few received any general adoption. In 1914 the National Board of Fire Underwriters adopted an elaborate classification separating building risks and contents risks. This was an approach toward classifications that would be of some value for ratemaking, but before sufficient experience could be gained from it, it was superseded by a much abbreviated system, based primarily upon character of contents or nature of occupancy, a system that has serious shortcomings for ratemaking.

This latter system, with subsequent modifications, is in quite general use today. It is copied, with minor modifications, in the system used by many mutuals, and it is approved by the Federation of Mutual Fire Insurance Companies. An example is given below of the grouping in this system, with one grand division (warehouses) itemized to illustrate the subclassifications. The number code facilitates reference and machine tabulation.

TABLE 34

RATE CLASSIFICATION MANUAL

Code No.	*Classification*
1–99	Nonhazardous risks
100–200	Mercantile
201–299	Warehouses
	253 Cold storage, buildings
	254 Cold storage, contents
	256 Cotton, building and contents
	259 General storage, incl. furniture, contents
	266 Fibres (other than cotton, wool, tobacco)
	270 Naval stores in storehouse or yard
	272 Oils in barrels, drums or cans
	276 Tobacco, building and contents
	278 Whiskey and liquors, building and contents
	280 Wool, building and contents
	290 Potato warehouses, building and contents
300–599	Manufacturing specials
	300–320 Woodworkers
	322–339 Metal-workers
	340–599 Other occupations
600–699	Nonmanufacturing specials
700–799	Miscellaneous
800–999	Automatic sprinklered risks

Diversion of the discussion into the nature of classified experience has been made to dispel the illusion that fire insurance rates rest upon statistical data, the supposition usually being based upon a vague notion about this classified experience. As stated by a late lifetime fire insurance executive, "The result now obtainable from each class group is but one average fire cost of the risks in that class without distinction being given to the good, bad and indifferent. Classification of fire insurance experience has never been carried beyond that point, and therefore has as yet no practical value for ratemaking purposes." [5]

Schedule rated risks. *1. Variation in rates by localities.* Since statistical data for adjusting rates to particular localities are lacking, the National Board Schedule for Grading Cities and Towns has been relied upon for establishing basic rates in many localities. This Schedule was not originally designed for rating purposes, according to National Board officials, but it has been used for this purpose since it was introduced. It was really intended as a rating of public fire protection, but it results in a "deficiency point" rating for each city to which it is applied, and therefore comparisons between cities is possible with respect to the factors covered. It will be described in more detail later in this chapter.

2. Variations between individual risks. Inspectors take care of differences between individual risks by examining each risk and applying to the inspection report a schedule of deficiency charges and superiority credits. The rating organization having jurisdiction over the territory maintains a corps of inspectors trained in engineering and fire hazards who visit the individual risks and prepare a report on the conditions found. A sample of such a report is reproduced on p. 473 for illustration. Such an inspection is required at the time of the original rating, and whenever a rerating is required. A rerating may be necessary either because the insured feels that his rate is unduly high, or because the rating organization changes its system of rating or believes that the conditions have changed.

The inspection report serves as the basis upon which a rating clerk in the rating organization applies the schedule in use. The number of schedules differs in various territories. There are about 20 schedules in use in the Middle Department and about the same number in New York City, but in other territories six or seven may be sufficient.

A very simple and short schedule may be sufficient for rating a wharf or lumber yard, whereas a long schedule with extensive subdivisions must be used for large mercantile buildings, manufacturing risks, fireproof buildings, and the like. These schedules are adapted as far as possible to the common types of risks found in the territory: a schedule for rating salmon canneries may be essential on the Pacific Coast, but a coal mine schedule is unnecessary. One of the most generally used schedules in all territories is the one devised for nonfireproof mercantile risks, which is sometimes

[5] E. G. Richards, "The Experience Grading and Rating Schedule," Van Nostrand Co., N. Y., 1921, and the statement holds true today. For a further discussion of classifications and the information furnished by them see also E. G. Richards, "Classification—Discrimination," an address before the Insurance Society of New York, National Board of Fire Underwriters, N. Y., 1913.

RATING SURVEY

SURVEY FOR APPLICATION OF THE UNIFORM MERCANTILE SCHEDULE

CITY, VILLAGE, TOWN OF..... FILE NO.....
LOCATION_____ MAP NO._____
GENERAL CONSTRUCTION_____
WALLS_____ HEIGHT_____
FRAME ADDITIONS_____ ROOF COVER_____
FLOOR CONSTRUCTION_____
FLOOR OPENINGS, DESCRIBE PROTECTION, IF ANY_____
_____
_____
_____
_____
CHIMNEYS; MATERIAL_____ BUILT FROM GROUND_____ BRACKET_____
DESCRIBE CHIMNEY LINING ONLY WHEN CHIMNEY CONSTRUCTION IS NOT OF CLAY BRICK_____
OCCUPANTS & OCCUPANCY_____
_____
_____
_____
_____
DESCRIBE WOOD AWNINGS, BAY WINDOWS, OPEN VERANDAS & CORNICES ON MASONRY WALL BLDGS. ONLY_____
COMMUNICATIONS_____
IF RISK IS PROTECTED BY FIRE APPLIANCES, WATCH & CLOCK OR BASEMENT AUTO. SPRINKLER, REPORT IN DETAIL, REVERSE SIDE. FAULTS OF MANAGEMENT TO BE REPORTED ON SEPARATE SHEET

DIAGRAM & EXPOSURES
INDICATE PRINCIPAL EXPOSURES WITHIN 125'

also applied to light manufacturing plants. This schedule is used for illustrative purposes in this chapter.

Although schedules vary in number and character in the various rating territories, the schedules in a given territory must follow some common system or method. The territories in which various rating systems are used are illustrated on the map in Fig. 19. Analytic territory is clearly indicated. All other districts may be said to be variations of the Universal Mercantile system. The South Atlantic States from Virginia to Alabama, inclusive, use Southeastern Underwriters Schedules. The two most common systems are: (1) the Universal Mercantile System,

developed in 1892 and now used in about 25 states, including roughly the East and South; and (2) the Analytic System, employed in about 23 states in the West and Middle West.[6] In individual rating jurisdictions, the schedules employed may differ so much in detail as to be hardly rec-

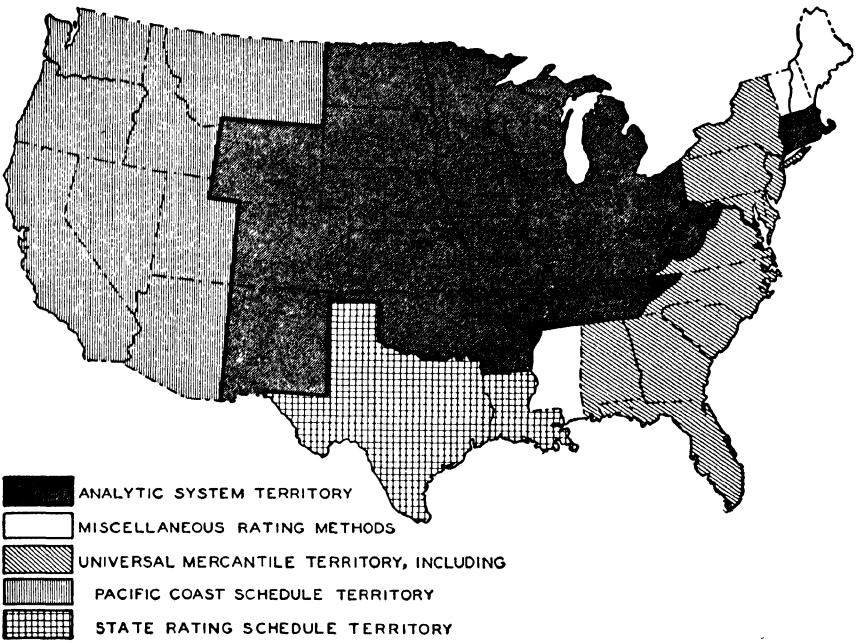


Fig. 19. Geographical Distribution of Various Rating Systems

ognizable as the Mercantile or Analytic system. Nevertheless most of them follow the principles of one or the other of these systems, and therefore in this chapter the systems are described rather than the schedules of any individual rating territory. The student can learn the schedules of the individual territory only by study, but the description of systems will make this study methodical and easy.

Advantages of schedule rating. The use of schedules was an important development in fire insurance rating. In the earliest stages all properties were divided into four or five groups, and different rates were established for the groups. When greater diversity of risks was recognized and the classified rates became impossible, personal judgment was substituted, an inspector forming his own conclusions about every individual risk of sufficient importance to be inspected. Numerous local schedules developed, and finally the Universal Mercantile Schedule re-

[6] Other more recent schedules are the Normal Rating System, by G. T. Forbush the Daw Schedule, and the L & L (Larter & Lemmon) Schedule. For description of the latter see R. Riegel, "Problems of Fire Insurance Rate-making," in *Annals of American Academy of Political and Social Science,* March, 1917, and the *Eastern Underwriter,* March 24 and 31, April 7 and 14, and July 16, 1917.

ceived wide acceptance. Later the Analytic System also achieved recognition. The advantages resulting from schedules were:

1. Combined judgment was substituted for individual judgment as to the relative importance of individual features of hazard.

2. Consistency in rating was maintained among individual risks in the same locality, among different localities, and at different times. Under the individual judgment method similar risks might receive different rates, similar risks in similar localities might receive different rates, and the same rating expert on the same risk might arrive at different rates at different times.

3. In the absence of schedules important hazards were overlooked. The schedule serves as a "guidebook" for underwriters. The same hazards are considered in connection with every risk of the same type, and more careful inspection and rating are promoted.

4. Under the schedule system the insured can be shown exactly what features of his risk increase his rate and by how much. Previously no satisfactory explanation could be given for differences in individual rates.

5. Since the insured can see from the schedule what he is penalized for, he is encouraged to remove the deficiencies and meet the schedule standards, thus reducing fire losses.

6. The schedule diminishes rate-cutting and unfair competition, because of the standardization of rates.

The Universal Mercantile System. Inasmuch as schedules "just grew," it is impossible to trace their origin. In New England schedules covering boot and shoe factories are said to have been first in use. One writer attaches particular importance to the 1868 woolen mill schedule of Providence. It is recorded that in St. Louis schedules were first adopted and printed in 1875. By 1890 a number of small mercantile schedules began to appear.

A committee of fire insurance underwriters in 1892 completed a schedule for rating mercantile buildings that was said to be mainly the work of its chairman, F. C. Moore. It was designed to replace the miscellaneous schedules used in various territories and founded upon no general principles. Although this schedule itself never approached universal adoption, its methods were widely copied and form the basis for many modern schedules.

The schedule begins with a basis rate for a "standard" building in a "standard" city. Its concept of a standard city, however, has been replaced by the gradings furnished by the National Board Schedule for grading cities (see pages 483-484), and each city now starts with its own basis rate. A city basis rate for a standard building is based upon judgment, supplemented by such statistical data as are available. The basis rate in a city of the second class might be established, for example, at $.10.

The basis rate would apply only to a "standard" building, and since the standard established in this system is usually high, most buildings will not meet the standard. Charges must therefore be made for deficiencies found in individual buildings. On the other hand the risk is entitled to credit for any super-standard features or protective devices.

Construction features are first considered, and charges are made for deficiencies in walls, roof, floors, ceilings, elevators, stairways, lighting, heating, and the like. These charges are in the form of cents added to the basis rate. Credits are then given for favorable construction features, but these are few in comparison with the items for which charges are made. The credits are per cents of the rate arrived at up to this point, on the theory that the more hazardous the risk, the greater the advantage of favorable features and protective devices. The effect of this arrangement may be seen from the simplified outline of the system in Table 35 and the result is the rate for the building unoccupied.

Since occupancy adds to the building hazard, an addition is made to the rate at this point for the nature of the occupancy. The amount is determined by reference to an Occupancy Table, which lists different charges for different types of occupancies. Stocks of retail clothing may entail a charge of $.05; a cotton gin may add $3.00 to the rate. After these charges, credits are given for protective devices, such as near-by hydrants, automatic fire alarms, fire extinguishers, watchman service, certain types of nonhazardous occupancies, and so forth. These, like the previous credits, are in the form of per cent reductions from the rate arrived at up to the point at which the deductions are made. The result is the rate of the building occupied, but "unexposed."

Inasmuch as the risk to the insured building and contents is increased by the possibility of the spread of fire from surrounding buildings, called the "exposing" risks, a charge is made at this point for such exposure hazard. No specific method was prescribed in the original draft of the schedule, but in a separate exposure schedule it was suggested that charges and credits should be dependent upon the characteristics of the exposing risks and should be varied with their distance from the exposed risk. These charges and credits were all in percentage form, being percentages of the rates on the various exposing risks after deduction of their own exposure charges. The result is the rate on the building, occupied and exposed.

At this point allowance is made for the per cent of insurance carried to value. The method used is an application of the coinsurance principle, discussed previously in connection with the coinsurance clause. For each per cent of insurance to value carried in excess of 50 per cent, ½ of 1 per cent of the rate is to be deducted, not exceeding 15 per cent in all, on building risks.[7] The final section of the schedule provides additions in cents for what are termed "faults of management," such as rubbish on the premises, lack of metal waste cans, and the like. The result is the final rate on the *building.*

If the insurance is on *contents,* the starting point for the calculation is the "rate of the building occupied." To obtain a basis rate for contents,

[7] This feature of the original schedule is seldom found in the modern adaptations. An 80-per cent coinsurance rate is usually quoted, and an addition is made to this rate to produce a "flat rate," the addition varying with some factor such as the magnitude of the rate itself. Sometimes the credits are 5 per cent for 90 per cent and 10 per cent for 100 per cent.

one fourth of the total deficiency charges on the building is deducted from the rate of the building occupied. If the rate of the building occupied is $1.54, the rate unoccupied $1.30, and the basis rate $0.10, the deficiency charges are $1.20. Therefore $0.30 is deducted from $1.54 to give $1.24 as the basic rate on contents. This procedure has the object of making the difference between the building rate and contents rate greater in proportion as the building is of substantial construction.[8]

TABLE 35

OUTLINE OF UNIVERSAL MERCANTILE SYSTEM*

Key Rate		$0.10
Construction Deficiencies		
Hollow tile-bearing walls	$0.10	
Other deficiencies	$0.09	$0.19
Hazards		
Additional occupant	$0.03	
Other deficiencies	$0.18	$0.21
Occupancy		
Box factory	$0.10	$0.10
Credits		
Iron fire escape	3%	
Watchman and clock	7%	
Basement sprinkler	20%	
	30%	−$0.18
Exposure		$0.20
Faults of Management		$0.20
Coinsurance Rate		$0.82
Flat Rate		$0.89

* This is not a copy of the original Universal Mercantile Schedule, but a simplified outline of an Eastern adaptation of it.

A figure in cents taken from the Occupancy Table (not the previously referred-to occupancy element in the building rate) is added for the susceptibility of the contents to damage. After credits in percentage form for fire appliances and other favorable features, a deduction is made for coinsurance in excess of 50 per cent, to the extent of ¼ of 1 per cent for each additional per cent insurance, not exceeding a deduction of 7½ per cent of the rate in all. The result is the final rate on contents.

This description, abbreviated as it is, does scant justice to the scope and detail of the schedule, but centers attention on the nature of the process. Because of the innumerable modifications that have been made of

[8] This principle seems to have been adhered to in subsequent modified forms of the schedule. In one local schedule the same result is attained by starting the contents rate at 4 to 10 times the building rate (depending on the combustibility of the contents) and increasing the contents rate at a slightly less rapid rate than the occupied building rate increases. Thus, the worse the building rate the closer are the building rate and the contents rate. There are four contents classes, A, B, C, and D. The rates for classes A and D are arrived at from the formulas below, and set forth in tables. In the following formulas, C represents the contents rate and B the building rate:—

$$\text{Class A contents } C \text{ (in cents)} = 32 + .91(B)$$
$$\text{Class D contents } C \text{ (in cents)} = 104 + .70(B)$$

the Universal schedule, it would be useless to describe any particular city schedule.[9]

Analytic System. The Analytic System was devised about 1902 by Mr. A. F. Dean, and is often referred to as the Dean system. Its principles are followed in about half the states today, mostly those in the Middle West and New England. The basis for its application is a "rate survey" report, as in the Universal Mercantile System. Because the Analytic System was copyrighted, it was exempt from the innumerable modifications the Universal Mercantile suffered and therefore may be said truly to be uniform wherever used.

The schedule begins with a basis rate for a standard building in the given city, but there is considerable latitude as to the choice of a basis rate. A series of basis rates is provided, which vary (a) with the choice of the rating authority, (b) with the public fire protection of the community, and (c) with the number of floors in the building. The master table is one with a basis rate of $1.00 for a one-story brick building in a sixth-class city, but other tables provide basis rates for the same standard risk of $.90, $.80, and so on.

TABLE 36

OUTLINE OF ANALYTIC SYSTEM*

				Alternative Basis Rate
Basis Rate, *building, 4 stories*			$0.50	$0.60
Structural Charges				
Area	20%			
Walls	6%			
Skylights	4%			
Floor Opening	24%	54%		
Occupancy Charges				
Ignitibility charges				
Candy factory	25%			
Boiler & Engine	56%			
Candy furnaces	20%			
Kettles	48%			
Combustibility charge	40%	189%		
		243%	$1.22	$1.46
Credits				
Standard fire escape	2%			
Fire extinguishers	5%	7% etc., etc.	−$0.12	−$0.14
Exposures, *none*			$0.00	$0.00
Flat Rate			$1.60	$1.92
Coinsurance Rate (85%)			$1.36	$1.63

* This is not a copy of the schedule, but a simplified outline of the method.

After the judgment of the underwriter determines the basis table to be used, there are fixed variations in basis rate for (a) cities of different classes and (b) buildings with different numbers of floors. The same

[9] Those sufficiently interested should obtain a copy of the schedule used in their community. The preceding description will serve as a guide to the features to be examined. For the original Universal Mercantile Schedule in full detail, see F. C. Moore, *Standard Universal Schedule for Rating Mercantile Risks,* New York: Continental Ins. Co., 1902, or F. C. Moore, *Fire Insurance and How to Build,* New York: Baker & Taylor Co., 1903.

method is employed for fireproof and frame buildings, with different basis rates. Thus in one territory there are used Brick Table 40 for cities of the first to eighth classes, and Brick Table 50 for cities of the ninth and tenth classes, Fireproof Table 25 and Frame Table 95. For a few types of risks with favorable experience, lower basis tables are used.

In the Analytic System, the basis rate is defined as that portion of the rate which covers unanalyzed features of hazard. That is to say, after charges and credits have been made for risk factors that are susceptible of analysis, some risk will still remain, too obscure, indefinite, or unimportant to schedule, and this risk is covered by the basis rate. The basis rate is therefore no different from any other charge or credit, except that it is for an unanalyzed residuum.

After the basis rate has been set, the first division of the schedule deals with construction features, and standards are formulated for important hazards. The survey will show in what respects the particular building fails to meet the specifications, and charges therefor are made in the form of percentage additions to the basis rate.

In the construction division, per cent charges are made for the area occupied by the building, deficiencies of walls and ceilings, presence of skylights, floor openings, partitions, and so forth.

This step is followed by the charge for the occupancy hazard, which is obtained from the table of occupancies. Some description of this table is necessary to illustrate its use. The occupancy table is an alphabetical list of occupancies each followed by three columns. A small part of the table would look like this:

OCCUPANCY TABLE

		(1)	(2)	(3)
101	ADVERTISING Novelties	10%	20%	D-3
102	AGRICULTURAL Implement Stocks	5%	10%	D-2
103	ALUMINUM Goods	3%	5%	D-1

All occupancies have been analyzed from a threefold point of view. Every occupancy has a tendency to originate fires, and the charge in Column 1 of the occupancy table is supposed to measure this tendency. It might be called a measure of *causes*. All tenancies contribute toward this risk, and therefore the charge assessed against any building is the sum of all Column 1 charges for all tenants.

To this are added charges for certain special features of the occupancy, such as supersize labor force, presence of high-pressure boilers, special furnaces for industrial work, gas engines, coffee-roasting furnaces, enameling operations, inflammable gases, and so on. These charges may amount in the aggregate to more than the original Column 1 charge.

The charges in Column 2 of the occupancy table are used to measure the *combustibility* of the occupancy. It is evident that cardboard boxes or drygoods are far more combustible than a stock of hardware. The facility of ignition, rapidity of combustion, and intensity of combustion determine the position of the occupancy in a sevenfold classification

designated as *C1, C2, C3,* and so on. Column 2 of the occupancy table allots charges for the combustibility classifications ranging from 5 per cent to over 300 per cent, without designating the combustibility symbols. But the combustibility classification influences the amount of special charges for causes, described in the preceding paragraph.

Only the tenant rated highest in combustibility contributes to the occupancy charge on the building, on the theory that combustibility is governed by the physical law that transfers of energy are made from bodies having more to those having less. In other words lesser combustibility is comprehended within the greater combustibility, unlike causes, which make independent contributions to fires.

Column 3 measures *damageability* of contents, and need not be discussed at this point, for it pertains only to insurance on contents.

To summarize, then, occupancy is covered by the addition to the rate of two per cent figures, one the sum of the Column 1 charges and the other the highest charge in Column 2 for any occupancy. In addition there may be charges for special features.

The percentages thus far arrived at are totaled and applied to the basis rate to determine the total charges, except for exposure. A basis rate of $.50 might be increased by 300 per cent charges to $2.00. The general procedure can be followed from Table 36.

At this point, percentage credits are given for features in construction that are superior to the standard. Credits are given for such items as fireproof floors, character of floor supports, roofs, mill construction, and so forth. These credits are totaled and applied to the dollar-and-cents rate found up to this point.

The premium charge may be reduced by private fire protection. For such things as watchman service, fire extinguishers, standpipes, and fire alarm devices, per cent credits are allowed, which are totaled and applied to the preceding rate. The result gives the rate of the building unexposed, that is, if it had no surrounding buildings.

The charge for exposure is based principally upon the risk of the exposing buildings and their distance from the building being rated, which we shall call the exposed building. The charge is modified by the grade of public fire protection and the type of construction of the exposed building. For fire protection of grades 1 to 3 the standard exposure charge may be 30 per cent, whereas in a Grade 10 city the charge is 40 per cent. For example, consider a brick building (*B*) exposed by a frame building (*F*) 15 feet away. In a sixth class town, the standard ratio of the rate to be used at less than ten feet distance is 40 per cent of the *F* rate (say, $1.50), or $.60. The exposure table then shows that 40 per cent of the standard ratio is to be used for this type of frame-brick exposure, giving $.24. Further, for each ten feet of clear space the table shows this mutual exposure to be entitled to a reduction of ¼, making the exposure charge in this example $.18.

Space here is insufficient to discuss all the details of the treatment of radiated, transmitted, and absorbed exposure, or of buildings in rows, so-called "transparent" and nontransparent buildings, abnormal expo-

sures, and so forth, but it is evident that an effort has been made to analyze the exposure hazard feature by feature as far as possible.

As a result of the above analysis, an exposure charge is added to the rate thus far arrived at, the total giving the rate of the building, occupied and exposed. Certain dollar-and-cents charges may be added for removable hazardous conditions in the particular risk, such as the presence of rubbish, dangerous storage of inflammable materials, handling of ashes, and the like, and the result is the final rate on the building. Dollar-and-cents charges violate the principle of *relative* charges and credits, but are excused on the ground that they enter at the end of the computation and can be removed without disturbing the whole calculation.

The rate thus arrived at is a "flat rate," i.e., a rate that requires no particular ratio of insurance to value. If the insured is willing to accept a 50-, 60-, 70-, 80-, or 90-per cent coinsurance clause, he is entitled to a reduction in the rate. The amount of the reduction (for buildings) depends upon (a) the type of building and (b) the per cent of coinsurance. For example, for a 90-per cent coinsurance clause, reductions in the rate can be obtained of 73 per cent on a fireproof building and 15 per cent on a frame building. For an 80-per cent clause, these reductions would be, respectively, 70 per cent and 10 per cent. For contents, the reduction varies with (a) type of contents, (b) type of building, and (c) per cent coinsurance.

It remains only to summarize briefly the treatment of contents. The risk to contents is greater than the risk to the building because of the partial salvage value of the building, and the greater damageability of the contents. The extent of the difference depends upon the value of the fire department protection. The damageability of the contents is indicated by Column 3 of the occupancy table (previously illustrated) as *D1*, *D2*, *D3*, and *D4*, in the order of damageability. Boots and shoes are classified as *D1;* bonnet and hat frames are classified as *D3*. Damageability charges are calculated that vary with the basic table used, the grade of fire protection, the floor on which the contents are located, and the damageability of the contents, and such charges are listed in a series of Contents Tables. For example, by consulting a $.60 basis table for a town of the third class, a *D3* type of contents may be found to have a charge of $.60 if located on the fourth floor.

In order to obtain the contents rate, to the rate of the building unexposed are added (a) such portions of the exposure charges as are applicable to contents, (b) charges for removable dangerous conditions, and (c) the damageability charge just described.

Comparison of schedules. Although both the Universal Mercantile and the Analytic schedules have the same purpose and proceed to a final rate by additions to and deductions from an initial rate, they differ in the following important respects.

1. Basis rate. The Universal Mercantile Schedule assumes that a basis rate of $.25 can be established for a "standard city," and that cities can be graded and assigned individual city key rates. These cities would all be tied to a single common standard, and state lines would be ignored

in the establishment of rates. The Analytic System also proposes to grade cities, but for each grade of city a number of different basis rates are available to the rating bureau. Instead of being a common standard, the basis rate is varied, with territory and with time, so as to produce a reasonable premium income. It gives that "over-all" check on results referred to at the beginning of this chapter.

Apart from the difference in objective just cited, the two schedule basis rates differ in nature. The Universal Mercantile basis rate of $.25 is a relatively low charge for a good building, which may be considered as an ideal to be achieved. The Analytic basis rate is a charge for the unanalyzed features of hazard on a very mediocre grade of building, indeed even rather below ordinary. Thus the ideal building conception of the Universal Mercantile system results in many charges and few credits, whereas the mediocre building of the Analytic System is subject to both charges and credits.

2. Charges and credits. The specific values placed by both schedules upon individual features of a risk are dependent upon underwriting judgment and lack substantiation in figures. In the Universal Mercantile Schedule the charges are in cents and the credits are per cents. The only reason for this differentiation seems to be that when the credit section of the schedule was reached it was thought that the worse the building up to that point, the greater the credit that should be given for good features. The great contribution of the Analytic System to the theory of fire rates was the consistent use of per cents for both charges and credits. This consistency results in a schedule whose various parts always are in the same proportion to each other, and these proportions are maintained regardless of differences between, or changes in, basis rates, as can be seen by reference to the illustration of the Analytic System accompanying this chapter.

The Universal Mercantile charges and credits bear no consistent relation to the basis rate and, strictly speaking, any change in basis rate should be accompanied by a complete revision of all charges and credits, under this system. The charges being in flat amounts, it is obvious that they can bear no logical relation to the different basis rates in different cities, or, putting it in another way, the grade of city does not influence the charges for specific defects.

3. Analysis. The Universal Mercantile Schedule, when originally published, was accompanied by one of the first discussions of reasons for procedures in fire rating. The discussion was undoubtedly a potent influence for adoption of the Universal Mercantile System. But the Analytic System went further: its analyses of such things as risk in general, occupancies, relation of charges to grade of city, and exposure, were more systematic and scientific in character than those of previous schedules. Whether the end results are of any more practical value than other schedules or not, one is impressed by the method of procedure and reasoning.

4. Occupancy. The Analytic System recognizes the great importance of occupancy, because human activities are the great cause of fires. In the Universal Mercantile Schedule, although the authors undoubtedly

considered processes, stocks, and other features, their result was one figure in an occupancy table, with few enumerated principles of analysis. The Analytic classification of cause, media, and effect puts the problem in a clearer light, whether or not the solution be accepted.

It should be emphasized that the Universal Mercantile Schedule was an important advance in fire rating, whose influence is felt even today, but the Analytic System made two great contributions to rating theory, namely, the flexible basis rate to enable adjustment of rate levels, and the system of relative (per cent) charges and credits.

5. Exposure. In both types of schedules, the exposure charge depends principally upon the distance between the exposing buildings and their rates. In the Analytic System, however, the per cent of the rate to be added to one or the other varies with the grade of fire protection, whereas in the Universal Mercantile Schedule this factor is not specifically recognized.

National Board Schedule for grading cities and towns. As previously stated, the Universal Mercantile and Analytic schedules originally defined and employed in the rating method a "standard city" base. When the Schedule for Grading Cities and Towns of the National Board of Fire Underwriters was developed, it came into general use as a device for measuring the relative conditions of cities and, consequently, for establishing *base rates for localities*, the starting points for promulgating premiums by means of the schedules in use in particular localities.

TABLE 37

OUTLINE OF NATIONAL BOARD SCHEDULE FOR GRADING CITIES AND TOWNS*

City Class	*Deficiency Points*		*Relative Value*	*City B*		*City E*	
				Points	*Class*	*Points*	*Class*
1.....	0- 500						
2.....	501-1000						
3.....	1001-1500						
4.....	1501-2000						
5.....	2001-2500						
6.....	2501-3000	Water.....	1700	143	(1)	253	(2)
7.....	3001-3500	Fire Dept.....	1500	290	(2)	705	(5)
8.....	3501-4000	Alarm.....	550	104	(2)	317	(6)
9.....	4001-4500	Police.....	50	0	(1)	5	(1)
10.....	4501-5000	Laws.....	200	78	(4)	19	(1)
		Hazard Ords.....	300	101	(4)	166	(6)
		Structural.....	700	186	(3)	308	(5)
		Climatic.....	...	91	...	54	...
		Divergence.....	...	..	...	54	...
			5000	993	(2)	1881	(4)

* This is not a copy of the schedule but a simplified outline of its method.

The Schedule enumerates nine main divisions of hazard and under each of these divisions prescribes standards. For example, under water supply, hydrants must be able to deliver 600 gallons per minute with a loss of not more than five pounds pressure between the street main and outlet; they must have not less than two 2½-inch outlets and also a large

suction connection where engine service is necessary, and so forth. The nine major divisions of hazard are shown in Table 37. Cities are inspected by National Board engineers, and to the extent that a city falls below standard it is assigned points of deficiency, the total of which determines its grade. For example: a deficiency of less than 500 points enables it to be placed in Class 1; one of over 4500 points reduces it to Class 10. The deficiency limits pertaining to various classes of cities are shown in Table 37.

The divisions of hazard are not all of equal weight in determining the result, the weights being based upon judgment. Out of the total of 5,000 points deficiency for the worst city, 1,700 points are allotted to water supply, 550 to the fire alarm system, 50 to the police organization, and so forth. A town may therefore be in Class 1 with regard to the police system and in Class 4 with regard to building ordinances, but the total deficiency points establish the grade, and not the average of the divisional ratings.

Table 37 also shows a simplified summary of the ratings of two cities at a recent date, as an illustration of the method of operation. Since the ratings may soon change, names of the cities are omitted. The two cities are placed in their respective positions on the deficiency scale, and if the criteria for ranking are valid, their shares of the state loss should be in the same proportions. City *E*, with 1,881 points' deficiency, should pay rates about twice as high as city *B*, with 993 points' deficiency.

In New York State, key rates vary exactly with deficiency points according to a uniform Key Rate Schedule, ranging from $.15 for 644-756 deficiency points to $.70 for 4,528-4,579 points. It has been shown, however, that in a number of jurisdictions elsewhere, city ratings do not bear any consistent relation to fire losses per capita or losses per dollar of valuation in various cities. By some, this inconsistency has been attributed to the fact that the schedule does not fully cover all the physical factors and covers none of the intangible factors that may contribute to losses. More interesting here, however, is the fact that the basis rates of premium fixed for various cities do not always agree with the National Board grading of such cities, thus implying that factors other than the National Board rating are taken into consideration in fixing the basis rates—possibly the loss experience. But if the implication is valid, we are leaving the field of schedule rating and entering upon a partial judgment system. It should be mentioned here that in Texas the state makes the rates, using its own city rating schedule and inspectors. Each factor is rated in dollars and cents so that anyone may readily see how much can be saved in premiums by remedying one or more physical hazards. The city basis rate is also modified by its actual experience for the past five years.

Criticisms of fire insurance rates. The following are the most common criticisms of fire insurance rates, as made at the present time, with some comments on their validity.

1. Rates are too high. This is a frequent criticism, usually unsupported by any concrete evidence, and has different meanings. If it

means that total premiums are excessive, such figures as are obtainable show that the contention is not justified. If it means that too much money goes for expenses of operation, as distinguished from losses, it must be said that this expense is inseparable from the agency system and the services rendered thereby. Mutuals with salaried agents serve as a competitive check upon expenses. If it means that the profit allowed to stockholders is excessive, the excessive profits should, if existing, be reflected in dividends and market prices of insurance company stocks. But these are not excessively high in comparison with the capital and surplus invested.

2. Rates are too high in particular communities. This situation may very readily exist. Since no published statistics of combined results for individual cities are obtainable, comparison is usually made with rates in other cities. Since no two cities are alike, the comparison is unproductive. Inasmuch as most city basis rates are founded on the National Board Schedule, there is probably not much unjust discrimination between cities in the same rating territory. This statement does not apply to cities in different rating territories. There is no statistical evidence to support either the critics or the defenders of the rates.

3. Rates are too high on particular classes of risks. As previously explained, owing to the heterogeneous nature of classifications, it is difficult to say just what a so-called "class" represents. One company may find a class profitable that another company rejects. It is a common impression that dwelling and other preferred-risk rates are very profitable, possibly because higher commissions are frequently paid for this business.

4. Rates have no logical foundation. In the sense that rates are mere guesses, this criticism is untrue, as shown by the discussion in this chapter. But the ratemaking system, as a whole, is incoherent and inconsistent. Dozens of different schedules are used throughout the country on similar risks. They cannot all be correct in principle, and they would not yield identical results if applied to identical risks. This diversity in methods is plain evidence that after 100 years of ratemaking there is no general agreement on the method by which rates should be made.

5. Rates have no statistical foundation. It is true that data are lacking to substantiate the component parts of rates charged. How much extra should be charged for a wooden shingle roof or a weak bearing wall, and what the losses are on retail drygoods stores with watch repairs on the second floor, in brick buildings adjoining dry cleaning establishments, are questions on which statistics are not available and under present methods never will be. Perhaps, as many believe, a satisfactory statistical basis for fire rates is an impossibility.

6. There is discrimination in favor of particular risks. This situation is infrequent and unlikely. All efforts are toward standardization of rates. Stamping departments of rating bureaus or underwriters' associations watch closely the rates at which policies are issued, and agents and brokers scrutinize the rates that competitors are able to secure.

The statistical method of ratemaking. As previously stated, rates as now made rest on very slight statistical foundation. The only at-

tempt to found a system of rates on classified statistics which has received any recognition is the Experience Grading and Rating Schedule (E. G. R.), devised by E. G. Richards. A brief description will serve to show the nature of the problem of classified experience.

This is a system, rather than a schedule, first printed in 1915. The ultimate data for rates are to be derived from a "loss card" and an "insurance written card" on every risk. These cards must note the state or city in which the risk is located, the occupancy class in which the risk falls, the amount written, the term of the contract, the expiration, the grade of building, the grade of occupancy, the grade of internal exposure and external exposure, and all other information necessary for the subsequent classification process. The cards are to be classified and subclassified to arrive at the kind of information desired.

The first step is to ascertain the ratio of losses, expenses, and fair profit to the insurance written, on all risks in the United States. The crucial ratio is losses to insurance written, so we may ignore expenses and profits for the moment. The second step is to obtain a similar ratio for the average risk in each particular state. These two ratios can evidently be easily obtained from the cards of losses and writings, and should be borne in mind, for they will be used later.

The third step, which presents exceptional difficulty, is to ascertain the average national rate on a risk of a specific kind. The data for ascertaining this rate are the actual experience recorded on the cards for all such risks written throughout the United States. No one state's records would furnish a sufficiently large volume of experience for the rate on a given type of risk.

In order to classify experience for obtaining a specific rate, three principal features of hazard are set up. These are not the common divisions of hazard (construction, occupancy, and exposure), but are: (a) inherent hazard, or the danger of loss because of qualities of the occupancy in question; (b) internal exposure, or the danger from the presence of other occupancies in the same building; and (c) external exposure, or the danger of loss from buildings surrounding the risk in question. The total hazard or risk is the sum of these three components. The method of dealing with each is now to be described.

The experience cards, loss cards in one pile and corresponding insurance-written cards in another, are first classified into ten grades of towns, the grade of the town being established by standards set up by the National Board of Fire Underwriters. Let us take one of these ten piles, the fifth class city, and trace it further.

All risks in fifth class cities can be subdivided into 530 occupancy classes, according to an occupancy table and code prepared for the purpose and similar in character to the occupancy table shown on p. 479 (but without the column of charges at the right). The table suggested for the purpose was the 1914 classification of the National Board, previously mentioned. We now have 530 piles of fifth class city cards, let us assume. In practice the number would be less, to the extent that all occupancies are not found in fifth class towns.

Let us suppose that the risk we are interested in is the contents or stock of a retail drug store, occupancy code number 123. Cards with this code number form one of the 530 piles previously referred to, and this pile can be taken and sorted into retail drug stores in three types of buildings, fireproof, brick, and frame. Our risk, we will assume, is located in a brick building. We shall ignore the cards classified as "fireproof" and "frame," therefore, and proceed further to subclassify the pack labeled "brick buildings."

At this point ordinary fire insurance classifications stop, but to make a rate, finer subdivisions are necessary. The brick building cards are therefore divided into five *grades* of buildings: excellent, good, average, indifferent, and poor. We shall assume that our retail drug store is in an average building, and that we are making a rate upon contents. The losses and writings of the cards we have segregated can now be totaled and the amount of *inherent loss cost* per $100 of insurance ascertained. We shall assume it to be $.30.[10]

All retail drug stores in average brick buildings are affected by other occupancies in the same building, a risk called "internal exposure," which may be slight or serious depending upon its nature. The retail drug stores in average brick buildings are therefore next divided into five grades of internal exposure, or six grades if zero is counted. If a drug store were the sole occupant of the building, the internal exposure would be zero. At this point the cards we have segregated can be totaled and the amount of *internal exposure cost* per $100 of insurance ascertained. We shall assume it to be $.10.

Throw together again the subdivisions of internal exposure and divide the retail drug stores in average brick buildings into five grades of external exposure. Then the loss cost of the *external exposure* can be ascertained. We shall assume it to be $.35. The final rate can now be computed on a rate sheet as follows:

RETAIL DRUG STORE, CONTENTS, OCCUPANCY CODE NO. 123
LOCATED IN 5TH CLASS CITY
CONTAINED IN BRICK BUILDING

		Cost
Inherent Hazard, Quality Grade Average or A		.30
Internal Exposure, Quality Grade Nonhazardous or 1		.10
External Exposure, Quality Grade Medium or 2		.35
Total average loss cost	(55% of final rate)	.75
Plus expenses	(40% of final rate)	.55
Plus profit	(5% of final rate)	.07
Average rate of this risk in United States		1.37

$$\frac{\text{Average cost ratio, Connecticut } \$0.90}{\text{Average cost ratio, United States } \$1.12} \times 1.37 = \$1.10$$

which is the rate for this risk in the state of Connecticut.

[10] If the rate were being computed on the building there would be no inherent hazard and the contributing factors would be internal exposure (if any) and external exposure (if any).

In the summary above, the costs of inherent hazard, internal exposure, and external exposure are added to arrive at the total loss cost. Since it is known from available statistics that losses, expenses, and profit form certain percentages of the total cost (although in recent years not the percentages used here), proper amounts can readily be added to obtain the average rate that would have to be charged in the United States.

Losses in some states, however, are considerably lower than in others and these states should pay less than the average premium. In our illustration Connecticut, with a good loss record, is entitled to a rate lower than the national rate. The figures for the particular state and for the United States are the ratios referred to previously, in the third paragraph of this section (page 486).

TABLE 38

EXPERIENCE GRADING AND RATING SCHEDULE
(An outline of the method of sorting Experience Cards)

	City Classes	*Classes*	*Classes*	*Grades*		
Card Records of Writings and Losses	Class 1 Class 2 Class 3 Class 4					
	Fifth Class City	Class 121	Fireproof	E(xcellent) G(ood)		
		Class 123	Brick	A(verage)	Internal Exposure	0 1 2 3 4 5
					External Exposure	0 1 2 3 4 5
				I(ndifferent) P(oor)		
			Frame			
		Class 125				
	Class 6 Class 7 Class 8 Class 9 Class 10					

For the grading of quality of buildings, quality of contents, and internal exposure, the system provides schedules of the same general nature as the Universal Mercantile Schedule, except that the entries are ex-

pressed in points. These are the only parts of the system that are really "schedules," in the sense that we have been using the term.

Obstacles to the statistical plan. The statistical basis for rates has no disadvantages; everyone familiar with the subject admits it would be ideal, "if it could be done." The E. G. R. system has a good idea in its modification of rates by states by comparing the individual state results on all classes of business with the national results on all classes of business, and using this ratio as a rate differential. This is an adaptation of a method developed in compensation insurance rating. The division into three elements of hazard is also logical and clear.

The test of the whole plan centers, however, on the multitude of classifications necessary to secure all the desired rates. A rate on contents for our hypothetical retail drug store seems to involve over 79,000 separate classes of risks up to the point where internal exposure is considered. The latter factor would require five times as many separate classes, or over 397,000, and the same would be true of external exposure. There is some exaggeration in these figures because not all occupancy classes will appear in all classes of cities, not all grades of buildings will contain all occupancies, and so on. The task is nevertheless a tremendous one, and in some classes there might well be inadequate experience to make a rate.

Great expense would be involved in the application of the grading schedules all over the United States and in punching the information on cards. This expense would have to be assumed for a number of years before any actual rates could be made. Even after the inception of the classification method there would be some classes of risks on which data would be insufficient to form a satisfactory basis for rates, and these would probably have to continue for some time under the old system of rating.

The National Board of Fire Underwriters established an Actuarial Bureau to collect this information, adopted the occupancy classification required, and for several years was thought to be engaged in working on the method. The whole project quietly died, however, the Actuarial Bureau taking up the task of supplying such uniform classified statistics as are required by statute, and no actual rates were ever published. Thus ended the only organized effort at statistical ratemaking. To make rates on a statistical foundation is a difficult undertaking, of vast magnitude, with results that are problematical.

State regulation of rates. *1. Common law.* In the early days before antitrust legislation existed, the only restraint upon insurance company methods of ratemaking were suits brought under common law. This is the situation today in states where no statutes on the subject exist. Contracts in "restraint of trade" were not illegal, however, but merely extralegal, the courts refusing to enforce the rights of one party as against another. "Conspiracy" was an allegation carrying with it no penalty unless unlawful means were used or unlawful ends attained, neither of which practices was true of insurance company co-operation. "Monop-

oly" was not illegal except with respect to food and other commodities, and insurance is not a commodity. Common law, therefore, presented no barriers to the co-operative making of rates, the formation of associations for this purpose, the setting up of common rating bureaus, or the making of agreements to adhere to the rates established.

2. Antitrust laws. With the development of antipathy to large-scale industrial organizations and the "trusts," came the enactment in numerous states of laws forbidding combinations intended to regulate competition or maintain or enhance prices. These laws specified that they were applicable to "trade," "commerce," "business," "dealings in commodities," and the like, and attempts were made to bring insurance within the scope of these terms. Although in one or two states such laws were held applicable to fire insurance companies, as a general rule insurance was judicially considered as not falling within these categories, and hence the laws were inapplicable to insurance companies.

3. Anti-compact laws. Since general antitrust laws failed to embrace insurance, laws were enacted specifically enumerating insurance and forbidding combinations or agreements for the purpose of regulating or fixing the "price or premium to be paid for insuring property." In general, such laws were effective where enforced, and the decisions held that insurance was a legitimate field for state regulation. They also held that states might forbid combinations of this character without infringing upon state or federal constitutional provisions guaranteeing the "right of contract," "equal protection of the laws," or "due process of law." In 1917 there were 22 states having such statutes on the books. A number of the statutes were not enforced, however, and others had been superseded by newer legislation although not actually repealed.

4. Abandonment of the competitive principle. All the preceding laws were designed to enforce competition. They were founded upon faith in "free competition" and the "law of supply and demand." These doctrines, however, had already been undermined in the railroad and public utility fields, and competition was especially inappropriate in insurance for a number of reasons: (1) Under a competitive system the large property owner, who can exact concessions in rates, profits at the expense of the little fellow. (2) If an insurance company cuts rates below cost, it weakens its own financial ability to pay losses, which is what the premium is paid for. (3) Insurance rates obviously should be based upon cost. (4) Competition for business results in higher commissions to agents, thus increasing the expense of doing business at the same time premiums are being reduced. (5) Unrestrained competition leads ultimately to monopoly by the few strong companies that are able to survive the struggle.

5. The co-operative method. As a result the competitive principle in state legislation began to give way to the co-operative principle, just as it had already in the actual world. Between 1917 and 1926 there was little change in the number of anti-compact laws on the books, but many of them became "dead letters" and the new type of legislation was already receiving recognition. In 1940, although all but eight states and terri-

tories had general antitrust statutes, only 14 states and territories had anti-compact laws. Many of these are utterly ignored and might just as well be taken off the books.

6. Modern legislation. New legislation involved two diverse tendencies. In Texas the entire rating function was assumed by the state: the companies no longer have any control over rates to be charged. A state commission supervises and a state rating board makes the rates. Texas is the only state that has adopted this method, but it has adhered to the state rating system since 1910.

In other states, however, legislation was designed to promote co-operative ratemaking under state supervision and regulation. The following is an outline of the types of legislation most frequently found:

(1) Laws regulating ratemaking organizations. These are most important because they embody official recognition of the value of co-operative methods. In 1941, 13 states and Hawaii had statutes *requiring* every fire insurance company to maintain or be a member of a rating bureau. Of these, three states established by law a single rating bureau of which every fire insurance company was required to be a member,[11] and eleven required that every fire insurance company must maintain or be a member of some rating bureau.[12] Eleven other states authorize (i.e., permit) fire insurance companies to maintain rating bureaus.[13] Two states permit companies to employ a "common rate expert," [14] which amounts to much the same thing. In a number of other states, in the absence of any regulation, companies naturally use bureaus or common rate experts.

(2) Laws to secure adequacy and reasonableness of rates, by requiring their approval by the insurance department, or by giving the insurance department power to order decreases or increases when found necessary. In some states the companies are required to file with the insurance department certain "classified statistics" of results on specified groups of risks.

(3) Laws requiring publicity of rates and methods by requiring that rates be filed with the state, that the insured be given a copy of the make-up of his rate on request, and so forth.

(4) Laws to prevent discrimination in rates, simply by prohibiting it and by giving the insurance department power to remove any that becomes apparent.

The tendency to recognize co-operation in ratemaking is evident, not only from the number but from the importance of the states that regulate bureaus. The reluctance of some to part with the revered doctrine of competition is illustrated in one statute that gives companies permission to maintain rating bureaus "subject to the anti-monopoly law of the state." As explained on pages 67-68, the Supreme Court in 1944

[11] Louisiana, Mississippi, and Virginia.

[12] Colorado, Hawaii, Illinois, Indiana, Kentucky, Minnesota, Ohio, South Carolina, West Virginia, Wisconsin, and Wyoming.

[13] Idaho, Kansas, Michigan, Missouri, New York, North Carolina, Oregon, Pennsylvania, South Dakota, Vermont, and Washington.

[14] Arkansas and New Jersey.

held that insurance was commerce and subject to Federal regulation. In 1945, Congress passed Public Law 15 deferring application of Federal antitrust laws to insurance. The issue of "state versus Federal regulation" involves far more than merely ratemaking, of course.

The recognition that ratemaking and other insurance activities must be supervised by some public authority is evidenced not only by the existence of the numerous present state laws but by the statement of Public Law 15 of the Federal Government that "the continued regulation and taxation by the several states of the business of insurance is in the public interest." The implied request by Congress for the states to enact satisfactory laws regulating the business of insurance before January 1, 1948[15] foreshadows an effort toward uniform state legislation.

The law of New York provides an illustration of the modern tendency in legislation and indicates the probable direction of future state regulation. It distinguishes between two types of co-operative organizations: (a) service organizations, which inspect risks, adjust losses, establish standards, and so forth, but do not make rates, and (b) rating organizations. An organization of the latter type is composed of members, who participate in its policy, and subscribers, who merely purchase rates or services.

A rating bureau must furnish rates and services to all members at a reasonable charge, do business with any broker who adheres to the rules, and furnish information to the insured on his rate. It has to file basic rates and schedule charges with the insurance department, and no member may deviate from the rates filed, without notice and permission to file modified rates. The bureau is subject to examination by the department of insurance.

The only fire insurance rating organization in the state at present is the New York Fire Insurance Rating Organization, which is supported by a percentage assessment against the premium income of its members, and by the sales of its services.[16] The Rating Organization has jurisdiction over fire insurance, use and occupancy, demolition, rent, leasehold, and profits insurance rates. Rates for these incidental lines, roughly speaking, are based on and computed as a fraction of the fire insurance building or contents rate. In addition to a central office in New York City there are four branches, one for New York City proper, one for New York City suburbs, one for Buffalo, and a Syracuse office that covers all cities other than New York and Buffalo. It has a membership of about 220 stock companies, 25 mutuals, and a few reciprocals.

[15] Public Law 15, effective March 9, 1945, Sec. 2 (b) states: "No Act of Congress shall be construed to invalidate, impair, or supersede any law enacted by any State for the purpose of regulating the business of insurance, or which imposes a fee or tax upon such business, unless such Act specifically relates to the business of insurance: PROVIDED, That after January 1, 1948, the Act of July 2, 1890, as amended, known as the Sherman Act, and the Act of October 15, 1914, as amended, known as the Clayton Act, and the Act of September 26, 1914, known as the Federal Trade Commission Act, as amended, shall be applicable to the business of insurance to the extent that such business is not regulated by State law."

[16] The New York State Fire Rating Organization costs about $1,500,000 a year, and its assessments have been ¾ of 1 per cent on net premiums written. If this figure is typical, rating bureau operation in the United States costs $5,000,000 a year.

The work of a large rating bureau includes much more than just inspection and rating. The following are the usual departments, with a brief statement of their work: (1) Rating department, which inspects and rates all risks other than sprinklered risks and gives advice on improvement of risks. (2) Sprinkler Risk department, which inspects and rates sprinklered risks, and examines proposed new installations to see if they will meet the standards required. (3) Stamping department, which examines the daily reports supplied by agents to see if the policies described

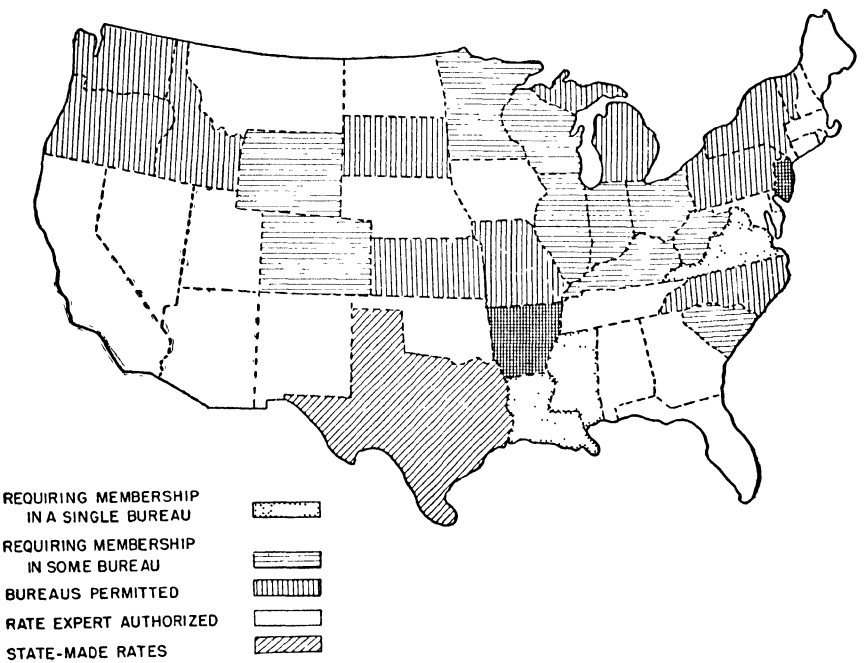


Fig. 20. State Laws Regulating Fire Insurance Rates

on these daily reports are in accord with the rules and regulations and written at correct rates. Companies are notified of violations and are subject to fine if they are not corrected within the prescribed period. (4) Counter department, which furnishes information concerning established rates and their composition. (5) Engineering department, which inspects and grades the fire defenses of small towns by the application of the National Board schedule, makes recommendations to civil authorities, and sometimes tests fire apparatus. (6) Supply department, which distributes rates, forms, endorsements, and so forth, to agents.

The whole country, with the exception of those states where state rate-making exists, is covered by rating bureaus. Over 30 of these have jurisdiction over one state, the Board of Fire Underwriters of the Pacific covers four states and Alaska, the Mountain States Inspection Bureau covers three states, the New England Fire Insurance Rating Organiza-

tion covers five states, and the Middle Department Rating Association covers three states. Some of these rating bureaus are apparently governed in policy by underwriters' associations, some are ostensibly "independent rating bureaus" that sell their rates, and others are directly managed by the associated companies.

Summary

I. Nature of fire insurance rates
  A. Depend on losses and expenses
  B. Should be not only reasonable but equitable
II. Possible rating methods
  A. By reasonable aggregate results plus judgment of individual factors contributing to losses
  B. By classified statistical experience
III. Present rating methods
  A. Three types
    1. Class rates
    2. Minimum rates
    3. Schedule rates
IV. Schedule rates
  A. Variations in losses between localities recognized by the National Board Schedule
  B. Variations between individual risks recognized by schedule rating
  C. Two basic types of schedules in use
  D. Numerous advantages of schedule rating over unassisted judgment methods
V. Universal Mercantile System
  A. Description of the process of applying the schedule
VI. Analytic System
  A. Description of the process of applying the schedule
VII. Comparison of the two methods
VIII. National Board Schedule for Grading Cities and Towns
  A. Description of the process of applying the schedule
IX. Criticisms of fire insurance rates—comments on criticisms
  A. Rates too high considering aggregate results—not proved
  B. Rates too high in particular communities—perhaps true, but no proof either way is at present available
  C. Rates too high on particular classes of risks—perhaps true, but there are few standard classes
  D. Rates have no logical foundation—true in the sense that there is no accepted theory or national uniformity of method
  E. Rates have no statistical foundation—true as to individual factors of hazard
  F. Discriminations in favor of particular risks—probably merely temporary in character
X. The statistical basis of ratemaking
  A. The proposed E G R system depends upon classified experience.
  B. There are serious practical obstacles to any statistical plan.
XI. State regulation of rates
  A. Common law presents no obstacle to combinations fixing rates.
  B. Antitrust laws do not, as a rule, apply to insurance.
  C. Anti-compact laws apply specifically to insurance rates, but are now seldom enforced.
  D. The co-operative method has come to be recognized as superior to competition.

E. Modern legislation permits, and even encourages, company associations for common ratemaking.
1. Description of a rating bureau

Readings

Hobbs, C. W., "State Regulation of Insurance Rates." *Proceedings, Casualty Actuarial Society,* New York, June, 1925 and November, 1941.

Riegel, R., "Measurement of Fire Hazard." *Institute of Fire Insurance,* Pittsburgh, American Mutual Alliance, 1940.

Nolting, O. F., *How Municipal Fire Defenses Affect Insurance Rates,* Chicago, International City Managers' Association, 1939.

Wandel, W. H., *The Control of Competition in Fire Insurance,* Lancaster, Pa., the author, 1935.

National Board of Fire Underwriters, "Classification of Occupancy Hazards," October 29, 1914 and January 1, 1946.

Mays, M. W., *Fire Insurance Rating in Pennsylvania.* Philadelphia: privately printed, 1935.

Simon, Shepard, and Sharp, *Fire Losses and Fire Risks.* Berkeley: University of California Press, 1943.

Hardy, E. R., "Is a Statistical Basis for Rating Possible?" *Proceedings, Casualty Actuarial Society,* New York, May, 1924.

Lemmon, W. S., *Fire Insurance Rating Systems,* New York, the author, 1917.

Forbush, G .T., "A Comparative View of Rating Schedules," Lecture to Insurance Library Association of Boston, 1916.

Forbush, G. T., "Notes on Rates and Ratemaking," *Lectures on Fire Insurance,* Insurance Library Association of Boston, 1912.

Dean, A. F., *The Philosophy of Fire Insurance.* Chicago: E. B. Hatch, 1925.

Moore, F. C., *Standard Universal Schedule for Rating Mercantile Risks.* New York: Continental Insurance Co., 1902.

Moore, F. C., *Fire Insurance and How to Build.* New York: Baker and Taylor Co., 1903.

Riegel, R., "Problems of Fire Insurance Ratemaking," *Annals of American Academy of Political and Social Science,* Philadelphia, March, 1917.

Richards, E. G., *The Experience Grading and Rating Schedule.* New York: Van Nostrand, 1921.

Glidden, J. S., *Analytic System for the Measurement of Relative Fire Hazard.* Chicago: J. S. Glidden, 1916.

Larter, A. E. and Lemmon, W. S., *The L. & L. Rating System.* New York, the authors, 1917.

New York Insurance Department, Reports on New York Fire Rating Organizations, *New York Insurance Report,* various years.

Problems

1. Explain what is meant by the statement that a fire insurance rate is dependent upon three principal elements, the risk itself, the location, and the time.

2. Why is the ratio of losses to premiums an unsatisfactory basis for ratemaking?

3. Is there anything to be said for judgment rating, as compared with schedule rating?

4. Why are schedules not used for rating all risks?

5. The ratio of losses to insurance varies from $.65 to $1.00, let us say, per $100 of insurance. The Analytic Schedule provides a series of base rates that can be adjusted to the loss ratio. It also provides a table showing the relation of each component part to the total hazard. Why is the Analytic Schedule not a complete solution of the rating problem?

6. What relation exists between "building" and "contents" rates?

7. In what respects was the schedule system an improvement over the judgment system?

8. Would you be in favor of a law forbidding fire insurance companies to combine for the purpose of making rates and forbidding the formation of underwriters' associations?

9. Explain the difference between a specific rate and a class rate.

10. What are the differences between the Universal system and the Analytic system with respect to: (a) basis rate, (b) system of charges and credits, (c) occupancy charges?

11. What resemblance is there between the fire rating system proposed in the Experience Grading and Rating Schedule, and the method of making compensation insurance rates?

12. Why is it any more difficult to make rates for fire insurance than for life insurance?

13. What determines whether the key rate for fire insurance in your city is higher or lower than in other cities?

14. How can a city obtain a reduction in its fire insurance premiums?

15. How can a manufacturer obtain a reduction in his fire insurance premiums?

16. Why were fire insurance companies able to combine for ratemaking purposes in states where general antitrust laws prohibited "combinations in restraint of trade and commerce."

17. Would you favor a law that *permitted* companies to be members of a rating bureau or one that *required* membership?

CHAPTER 24

Fire Insurance Reserves

Definition of the reserve. The reserve at any given time is that portion of the premium income of fire or casualty insurance companies which is not yet earned, owing to the fact that the policyholders have not received the full term of protection for which the premium was collected. It is the natural result of collecting the price in advance and delivering the product in the future. As the insured carries "prepaid insurance premiums" as an asset on his books, so the insurance carrier writes them as a liability on its balance sheet.

The policyholders pay for their insurance in advance for one year, often for three or five years, or even for longer periods; in fact, it is possible to secure a perpetual policy by the payment of one deposit.[1] In all these cases the company is holding prepaid premiums on policies for various terms, and from the time of the payment of the premium and the inception of the policy to its termination, the insured has a decreasing and the insurer an increasing equity in the premium. Although the entire premium is in the possession of the insurance company, only that proportion which is equivalent to the expired portion of the policy has been earned. The remainder is held by the company as an "unearned premium reserve" or "unearned premium liability." It is this sum that is sometimes called the "reinsurance reserve," although this term is open to misinterpretation. "Reinsurance" implies that this sum is necessary for reinsuring the risks and is held for that purpose, whereas reinsurance is merely one possible incident. The liability set up as "unearned premium reserve" may, in fact, exceed or fall short of the amount required to reinsure outstanding risks.

The unearned premium reserve has frequently been called a "trust fund" for the benefit of policyholders. In a technical or legal sense this appellation is not correct, for (1) there is no "fund," i.e., specific portion of the assets, set apart for such purpose, and (2) there is no "trust" because the holders of unmatured policies cannot trace or identify any specific property as theirs. The assets to offset the liability are, in fact, indistinguishably commingled with the other assets of the company. There is, nevertheless, some justification for the "trust fund" concept historically and in practice.

When insurance carriers changed from individuals and groups of individuals to corporations with limited liability for stockholders, experience showed that safety of operation demanded that some liability be set up

[1] The plan of Philadelphia Contributionship for Insurance, for example.

in addition to capital and surplus. The assets representing this liability have been tacitly permitted to be used for the prior benefit of unmatured policies, the remainder of the assets being left for general creditors. In five states, receivers are authorized to follow this procedure in case of insolvency if the plan is approved by the insurance department, but in three others, loss claimants are preferred to holders of unmatured policies. In the remaining states no statutes specifically indicate the resolution of this question, but hundreds of companies have reinsured their policies and ceased business without any questions being raised. It may be said that, historically and in practice, the unearned premium reserve is dedicated primarily to holders of unmatured policies.

Object of the reserve. The reserve, from the standpoint of the state, may be regarded as a necessity for solvency, which cannot be determined without a comparison of all assets and liabilities. Among the liabilities, paid-for protection must be included as a large item. The *pro rata* premium, it is true, is a very arbitrary method of evaluating the company's contingent liabilities. In life insurance all insurance policies involve claims, and the temporal incidence of these claims may be approximated from a mortality table. In fire and casualty insurance relatively few policies result in claims, and the time of occurrence of losses is much more uncertain. Thus it cannot be said that the unearned premium reserve measures future losses with any accuracy. For example, the depleted assets resulting from the heavy losses of the San Francisco conflagration were being replenished by the collection of additional premiums from 1906 to at least 1910.

From the standpoint of the insured, the reserve may be regarded as a liability set up to enable the company to return the unearned portion of the premium in case of cancellation, provide for the reinsurance of the risks with other companies, and make some provision for meeting future losses. It is very important to the insured, for example, to know that the premiums paid in advance are available for the payment of future losses and are not used for dividends to stockholders or payment of expenses of operation. In Chapter 18, one of the provisions of the standard policy discussed was the cancellation clause, which provides that either the company or the insured may cancel, upon proper notice. It necessarily follows that the company must always be in a position, in such cases, to return the unearned portion of the premium.

Also, if the company desires to retire from business and to transfer the risks to another company, the reserve alone makes this procedure possible. It is not to be inferred, however, that another company will assume these risks under all circumstances for exactly the amount of the reinsurance reserve, for the transfer depends on the character of the risks that are being carried. If the underwriting methods of the retiring company have been conservative, it may be that another company will be glad to assume the business for an amount 40 per cent less than the unearned premium reserve. On the other hand, if a reckless or unfortunate company has accumulated undesirable risks on its books, it may be that the reserve held will be considered insufficient. In fact, when a company

goes out of business, the reason frequently lies in unsuccessful methods of underwriting, and the accompaniment is usually an inadequate reserve. In these cases the transfer of the risks often requires a sum exceeding the reserve.

From the standpoint of the company the exhibit of the unearned premium reserve as a liability is necessary to a correct statement of profit or loss. If a company wrote $240,000 of one-year premiums during the first year of existence and at the end of the year losses amounted to $84,000 and expenses to $108,000, it might seem that there was a profit of $48,000. But if the unearned premiums amount to ½ of $240,000, or $120,000, there is in fact a loss of $72,000.

The reserve is necessary, therefore, as (1) a premium as yet unearned, (2) a necessary element in estimating solvency, (3) an estimate of the necessary cost of cancellations, reinsurances, or future losses, and (4) a factor in correctly calculating profits.

Importance of the reserve in regard to premium payment. It is the maintenance of the reserve that makes it possible to pay premiums in advance with safety. The insured knows that the portion of his premium which the company has not earned is covered by the assets on hand and that he may secure his proper share of it if he surrenders his policy before maturity. Besides, the knowledge that this sum is subject to state supervision reassures him when prepaying the premium for one, three, or perhaps five years. If, for instance, on July 1st, the company insured property for one year and collected $365 premium, on August 1st only $31, or 31 days' premium could actually be considered earned by the company on that particular policy. The other $334 belongs to the insured. The company under this contract is supposed to furnish protection for the remainder of the year and can claim the premium as its own only in the proportion that protection has been given; at any time the balance in its possession is unearned and is held for the benefit of the policyholder. A calculation as exact as the above, when the premium is reduced to a daily basis, is seldom made because of the unnecessary detail involved. Methods of satisfactory approximation will be described later.

Calculation of the reserve. The reserve has been described as the unearned premium liability of the company. An accurate application of this idea would mean that the company would calculate every policy reserve separately, taking into consideration the exact proportion of the policy term that had expired. With perhaps 1,000,000 policies outstanding, this calculation would involve an enormous amount of work. A method of approximation had to be devised, therefore, and an assumption was made that as much business is written in one portion of the period under consideration as in another.

State laws prescribe this method of approximating the minimum reserve to be carried. Three classes of policies have to be considered, one-year policies, term policies, and perpetual policies.

(*a*) *One-year policies.* On these the laws generally require that the liability shall be computed as one half of the gross premiums, less premiums for reinsurance in authorized companies. It is assumed that an

equal amount of insurance is written in each period of the year, which is the same as saying that on the average all of the business is written at the middle of the year, if interest is ignored.[2] Policies written January 1st have expired at the end of the year, and policies written December 31st have 365 days to run, the average for both groups being about six months. Policies written February 1st have at the end of the year about one month to run, and those written December 1st have eleven months, the average for both groups being six months. It follows that in the case of one-year policies a company is required to have on hand as legal reserve only one half of the premium income on those policies.

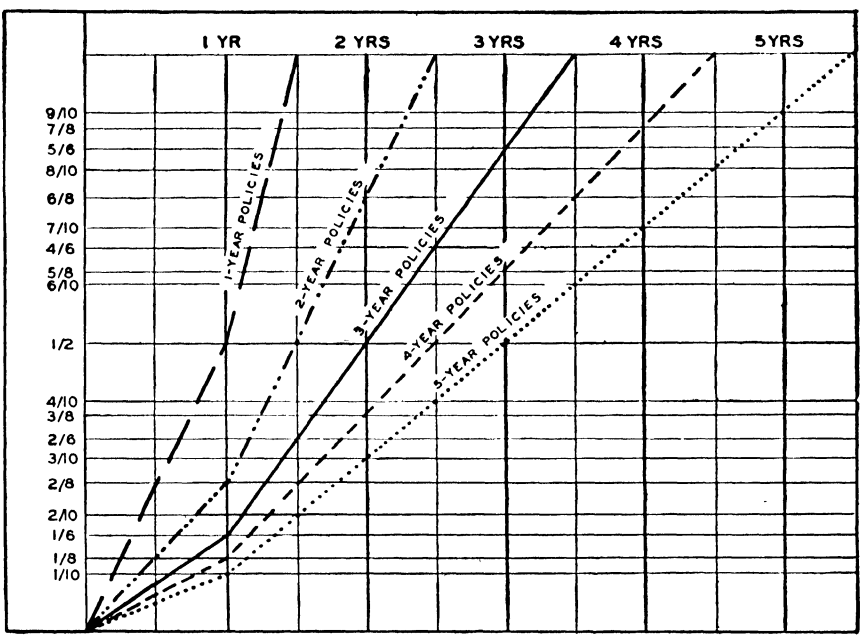


Fig. 21. Fractions of Premiums Assumed as Earned

(*b*) *Term policies.* In this group are included two-, three-, four- and five-year policies written at term rates. For these the laws prescribe a "pro rata amount." On all of the two-year policies written the same year it would be assumed that six months' premium out of twenty-four or one fourth is earned, and that at the end of the year the unearned portion is three fourths of the premium income; on three-year policies, five sixths of the premium would be a reserve liability; on four-year policies seven eighths and on five-year policies nine tenths, as shown by Figure 21.

[2] If interest were taken into consideration the reserve required would be smaller and the surplus greater. Thus, allowing 4 per cent interest on the figures in the hypothetical illustration in Table 39 the reserve necessary at the end of 1946 would be only $183,539, instead of $201,000.

(c) *Perpetual policies.* On perpetual policies the requirement is not less than 90 per cent of the deposit premium.

All of the fractions used for the reserve computation are applied to the gross premiums, less premiums paid for reinsurance, and consequently the reserve is based on the expense element as well as the risk element in the premium. In life insurance, and in some forms of insurance other than marine, the reserve is based on *net* premiums.

The approximation method for reserves does not give accurate results, because business is seldom evenly distributed over all periods of the year. In the case of a rapidly growing company, for example, it results in an underestimate of the reserve. In all companies monthly fluctuations in writings may make the calculated total exceed or fall short of the actual unearned gross premiums. Some companies for their own use divide their business into shorter periods than is specified by law. Their purpose is to calculate the reserve more accurately, since the smaller the period the more accurate the result. Frequently the monthly basis is used, with the assumption that as much business is written the first half of the month as the last. Thus, on one-year policies written during January, it is assumed that at the end of the month half a month's premiums have been earned, or 1/24. At the end of two months, 3/24 have been earned, and by the end of the year 23/24. On policies written in February, 21/24 of the premiums have been earned by the end of the year, and so on. The New York law (Section 74) permits the superintendent of insurance to require a monthly calculation if the "annual pro rata fractions do not produce an adequate reserve."

The operation of the reserve may be more closely traced in Figure 21, the curves showing the proportion of the earned premium at given periods.

It is assumed in Table 39 that the company began business in 1944 and during the year received a premium income of $40,000 on one-year policies, $18,000 on three-year policies, and $10,000 on five-year policies. The second year of business, 1945, the company received $60,000 on new one-year policies, $20,000 on new two-year policies, $24,000 on new three-year policies, and $20,000 on new five-year policies. The third year on new policies written it received $80,000 on one-year policies, $40,000 on two-year policies, $42,000 on three-year policies, $24,000 on four-year policies, and $40,000 on five-year policies. Applying the information shown in Figure 21, we find that in 1944 the company earned one-half of the premiums received for one-year policies or $20,000, one-sixth of the premiums on its three-year policies or $3,000, and one-tenth or $1,000 on the five-year policies. Deducting this from premiums originally collected leaves an unearned premium of $20,000 on the one-year policies, $15,000 on the three-year policies, and $9,000 on the five-year policies, or a total of $44,000 on hand at the end of the first year's business.

In the year 1945 the company earned the remaining one-half of the premium on the one-year policies written in 1944, or $20,000; on the

TABLE 39

ILLUSTRATION OF RESERVE CALCULATION

End of Year of Valuation	Year Policies Were Written	Term of Policies	Amount of Premiums Received	Fraction Earned During Current Year	Amount Earned During Current Year	Fraction Unearned to Date of Valuation	Amount Unearned to Date (Unearned Premium Reserve)
1944	1944	1 year	$40,000	1/2	$20,000	1/2	$20,000
		3 years	18,000	1/6	3,000	5/6	15,000
		5 years	10,000	1/10	1,000	9/10	9,000
	Total Reserve necessary at end of Year 1944						*$44,000*
1945	1944	1 year	40,000	1/2	20,000	none	none
		3 years	18,000	2/6	6,000	4/6	9,000
		5 years	10,000	2/10	2,000	7/10	7,000
	Unearned Premium on 1944 business						$16,000
	1945	1 year	60,000	1/2	30,000	1/2	30,000
		2 years	20,000	1/4	5,000	3/4	15,000
		3 years	24,000	1/6	4,000	5/6	20,000
		5 years	20,000	1/10	2,000	9/10	18,000
	Unearned Premium on 1945 business						$83,000
	Total Reserve at end of Year 1945						*$99,000*
1946	1944	1 year	40,000	..	.....	none	none
		3 years	18,000	2/6	6,000	1/6	3,000
		5 years	10,000	2/10	2,000	5/10	5,000
	Unearned Premium on 1944 business						$8,000
	1945	1 year	60,000	1/2	30,000	none	none
		2 years	20,000	1/2	10,000	1/4	5,000
		3 years	24,000	2/6	8,000	1/6	12,000
		5 years	20,000	2/10	4,000	7/10	14,000
	Unearned Premium on 1945 business						$31,000
	1946	1 year	80,000	1/2	40,000	1/2	40,000
		2 years	40,000	1/4	10,000	3/4	30,000
		3 years	42,000	1/6	7,000	5/6	35,000
		4 years	24,000	1/8	3,000	7/8	21,000
		5 years	40,000	1/10	4,000	9/10	36,000
	Unearned Premium on 1946 business						$162,000
	Total Reserve necessary at end of Year 1946						*$201,000*

three-year business written in 1944, it earned two-sixths, or $6,000; and on the five-year business two-tenths, or $2,000. With the premiums previously earned, an unearned premium of $16,000 on the business written during the first year of its existence is left at the end of the second year. During the year 1945, however, the company has written

some new policies, and reserves are also calculated for these policies by the same process and in the manner illustrated in Table 39. In the year 1946 there are premiums of 1944, 1945, and 1946 to be accounted for, but the calculation proceeds in the same manner as in Table 39. This same operation is repeated year after year always carrying over the unexpired portions of the policies written in previous years, with the results indicated by the table.

Financial importance. The total assets of fire and marine insurance companies in the United States probably amount to approximately $4.5 billion, and of this amount 30 per cent represents the unearned premium liability item. This sum, about $1.4 billion, is nearly all invested in securities. Fire insurance companies constitute an important medium for investment, in which the unearned premium reserve plays an important part, and such companies are in fact a specialized type of investment trust.

The following simplified balance sheet, for fire and marine insurance companies operating in New York state, exhibits the principal types of assets and liabilities:

Assets	*Per Cent*	*Liabilities*	*Per Cent*
Real estate	2.0	Unpaid losses	8.2
Mortgages	0.9	Unearned premiums	32.2
Collateral loans	0.0	Contingent reserve	2.1
Bonds	44.2	Other liabilities	5.3
Stock	36.7	Capital, guaranty funds, and deposits	11.2
Cash	10.5		
Uncollected premiums	4.4		
Accrued interest & rent	0.3		
All other assets	0.9	Net surplus	41.0
	100.0		100.0

As in the case of life insurance companies, real estate is limited to that necessary for the conduct of the business, and loans on collateral security are negligible. Two outstanding distinctive characteristics of the assets, however, are the large proportion thereof invested in securities and the very small percentage in mortgages. Whereas the expenditures of life insurance companies may ordinarily be predicted long in advance, fire insurance companies are subject to large emergency losses caused by conflagrations and storms. Even in the absence of great catastrophes their underwriting results fluctuate considerably from year to year. As a consequence the nonliquid mortgage is avoided and securities are preferred investments.

With regard to the securities item, it is noticed that the proportion invested in stocks is high, forming 38 per cent of the total assets. The high percentage is explained by the absence of legal restrictions on this form of investment, because of the fact that fire insurance contracts are short-term contracts, as contrasted with life insurance policies, and the insured has the opportunity of shifting his protection from a company that does not maintain a satisfactory financial position. All of the funds in the

hands of the fire insurance company are regarded legally as the property of the company, and speculation is considered as the normal practice. Stocks offer the opportunity of a larger return and a speculative profit. This aspect of the business is almost completely divorced from the underwriting branch of operations.

State regulation of investments. State laws usually prescribe different restrictions on the investment of (a) capital, (b) reserve, and (c) residue and surplus. The capital may be invested only in bonds of the United States, individual states, and civil subdivisions thereof, mortgage loans, and sometimes certain classes of public utility and railroad bonds. The reserve may be invested in any of the foregoing and also in corporate bonds that meet certain requirements as to net earnings and security, and in preferred stocks that meet certain requirements as to net earnings. The residue and surplus, in addition to the foregoing, may be invested in common stocks of solvent corporations. The law of New York (1940) restricts the latter investments by prohibiting investment in its own capital stock, in corporation stocks whose majority is owned by the investor or its officers, in companies whose assets are more than 20 per cent insurance stocks, and in insurance company stocks to the extent of more than 35 per cent of the investor's surplus to policyholders or 50 per cent of the investor's surplus over capital and liabilities. Although a number of other states do not impose these latter restrictions on stock ownership, it is common to limit the amount that may be invested in any one corporation.

Not only are the types of investments restricted, but, as in life insurance, the method of valuing investments is prescribed. This subject has been so fully dealt with in Chapter 11 that no further comment is required here.

Expenditures and receipts. The investments just referred to constitute one large part of the annual disbursements of a fire and marine insurance company. The other expenditures are for losses, expenses, taxes, and dividends. The losses are expected to be met out of surplus, contingency funds, unearned premiums, and finally, in the case of stock companies, capital. It follows, therefore, that the financial strength of a fire insurance company is not to be measured by the size of its capital alone. In fact, the capital stock equals only about 12 per cent of the total assets in the case of stock companies admitted to New York State. The capital, surplus, and contingency funds all represent amounts available to policyholders for losses, and they constitute about 55 per cent of the total assets of stock carriers and 47 per cent of the total assets of mutual carriers. An individual mutual company may have a surplus that exceeds the combined capital and surplus of a given stock carrier.

The losses of a fire insurance company consist of (1) ordinary losses from underwriting during years when no extraordinary catastrophe occurs, and (2) conflagration losses, because of large fires. The latter are more frequent than commonly supposed and constitute an indeterminable factor in fixing premium rates.

Expenses are of two types, fixed and variable. Among the first type

are salaries, rents, supplies, and rating expenses, which are largely independent of the volume of business done. The principal items of variable expense are acquisition expenses, loss expenses, and taxes.

Insurance companies pay (a) taxes in common with other businesses, such as property taxes, federal income taxes, social security taxes, entrance and incorporation fees, capital stock and registration taxes, and state income taxes, and (b) special taxes peculiar to insurance, such as premium taxes, license taxes, fees for annual statements, fire department taxes, agents' license fees, publication fees, and retaliatory taxes. These special taxes totaled over $106,400,000 in the year ended June 30, 1940, for life, property, and casualty insurance companies, it being impossible to separate the insurance branches. Of the total, taxes on premiums formed over 90 per cent. These are, in the last analysis, taxes on *insured* property only, and thus operate to discourage foresight. The smaller the economic enterprise, the more essential is insurance protection and the more certain that it bears the taxation burden. Even if any economic justification existed for special insurance taxation, premiums furnish no logical basis for the assessment of such taxes. Lest it might be supposed that the insured receives an adequate return in state services, it may be noted that only 4.7 per cent of the collected tax was spent for supervisory service to policyholders, and the remainder went into general revenue.

Such surplus as is available and need not be retained for emergencies or the stabilization of dividends may be returned as annual dividends to the stockholders in a stock corporation.

Profits. The fire insurance company's profit consists of two parts: (1) underwriting profit and (2) investment profit. The underwriting profit consists of the *earned* premium less *incurred* losses and expenses. The earned premium is the proportion of premiums received which has been earned, as computed later. The incurred losses are those from fires that occurred during the period in question, as distinguished from loss payments made during the period, some of which cover losses that actually occurred in a prior period. Thus we have the calculation shown in Table 39 A, on page 506.

The underwriting profit is considerably affected by the operation of the unearned premium reserve. During a period of increasing business, the additional unearned premium reserve reduces the underwriting profit. If the increased business is large enough in comparison with the total business, the accretion to the unearned premium reserve may entirely cancel any underwriting profit and even extinguish the company's surplus and impair its capital.

Investors and security analysts frequently use an "adjusted underwriting earnings" figure, arrived at by adding to the above result 40 per cent of the increase or subtracting 40 per cent of the decrease in the unearned premium reserve. In the case of reinsurance companies, 35 per cent is used. This is a rather artificial adjustment, based on the assumption that expenses consume 40 per cent of the fire insurance premium and that, since unearned premium reserves are calculated on gross premiums

TABLE 39–A

Total premiums received	$1,400,000	
Plus unearned premiums, Dec. 31 of previous year	1,200,000	
Less unearned premiums, Dec. 31 of current year	1,300,000	
Premiums earned during year		$1,300,000
Losses paid during year	400,000	
Plus unpaid losses, Dec. 31 of current year	70,000	
Less unpaid losses, Dec. 31 of previous year	120,000	
		350,000
Loss adjustment expenses during current year	40,000	
Plus unpaid loss expenses, Dec. 31 of current year	3,000	
Less unpaid loss expenses, Dec. 31 of previous year	4,000	
Loss expenses incurred		39,000
Underwriting expenses paid during current year	600,000	
Plus unpaid underwriting expenses, Dec. 31, current year	82,000	
Less unpaid underwriting expenses, Dec. 31, previous year	65,000	
Underwriting expenses incurred during year		617,000
Gain from underwriting		$294,000

and include expenses that are already paid, there is a "stockholders' equity" in the unearned premium reserve of 40 per cent. To put it in another way, since only losses and loss expenses need be paid out of the unearned premium reserve, 40 per cent of it is likely to remain after the payment of losses, and is therefore a "hidden asset," which swells and diminishes as the reserve changes.

In addition to the underwriting profit, however, the fire insurance company also earns income on investments of capital, reserve, and surplus. This income is known as "banking" or "investment profit." In the case of mutual companies, it goes either to reduce the cost of insurance to policyholders or to increase the financial stability. In stock companies, it either augments the surplus or is distributed to stockholders as dividends. In the latter case it is regarded as compensating the stockholders for the funds they have invested in the business, either in the form of capital or surplus.

In New York State in a recent year, for 368 carriers the results for underwriting and investment were:

	Stock		Other Carriers	
	Number	*Amount*	*Number*	*Amount*
Underwriting:				
Gain	188	$ 42,317,623	81	$36,987,802
Loss	90	8,947,803	9	50,970
Investment:				
Gain	54	3,959,071	45	1,319,582
Loss	224	224,672,893	45	7,305,800

In 1943, 225 stock companies in New York State, out of premiums written of $889,000,000, paid dividends to stockholders of $65,800,000 on a capital of $334,000,000. This amount was 20 per cent on the capital. But the surplus of these companies was $1,069,500,000, and therefore on

the "stockholders' equity" conservatively estimated the dividends were 4.7 per cent. The dividends were 7.4 per cent of the premiums, but this calculation is based on the business of a single year.

Since the question of reasonable fire insurance rates is tied up with profits, the question of whether fire insurance companies earn exorbitant profits has always been interesting to the insuring public. The National Board of Fire Underwriters and the insurance superintendents, through the National Convention of Insurance Commissioners, after some years of discussion, arrived in 1921 at the conclusion that the following principles should be applied to the calculation of underwriting profits.

(1) The investment profit is no part of the underwriting profit, and is considered as money that the stockholders might have earned equally well by investing the surplus otherwise than in fire insurance.

(2) The difference between earned premiums and incurred losses and expenses represents underwriting profit or loss.

(3) A reasonable underwriting profit is not less than 5 per cent of premiums plus 3 per cent additional conflagration losses.

(4) A conflagration is a property loss exceeding $1,000,000.

(5) Five years is the minimum term upon which to base a calculation of underwriting profits.

In law the question of whether investment earnings should be included as part of underwriting profit has not been conclusively answered by court decisions. It has been variously held: (a) that investment earnings were part of underwriting profit;[3] (b) that they were not part thereof;[4] and (c) that investment earnings on reserves alone should be considered as part of the underwriting results.[5]

It should be pointed out that a reasonable aggregate underwriting profit does not in any way establish the equity of rates on particular classes of business, for one classification may be written at exorbitant rates and help to pay the losses on another classification written at inadequate rates. This problem must be considered in connection with rating mediums and methods.

Criticisms of the fire insurance reserve. The present system of fire insurance reserves began in 1852 and its fundamental basis has never been changed. Not much can be said for its scientific character or logical foundation.

One of the important functions of a reserve is to pay future losses, and the present system of fire insurance reserves is not adapted to that purpose. Inasmuch as it is a percentage of the premium, it follows that if the premium charged is inadequate the reserve will be inadequate. As a percentage of the gross premium, including expenses as well as losses, it bears no fixed relation to losses. Nor as a percentage of the premium charged has it furnished any check upon ruinous competition.

The existing legal requirements work an undue hardship on new and

---

[3] *Aetna Ins. Co. v. Travis,* 259 Pac. 1068 (Kans.), for example.

[4] *Bullion v. Aetna Ins. Co.,* 237 S.W. 716 (Ark.). *Aetna Ins. Co. v. Hyde,* 273 U.S. 681, 275 U.S. 440 (Mo.). *Aetna Ins. Co. v. Hyde,* 34 Fed. 2d 185 (Mo.).

[5] *Aetna Ins. Co. v. Hyde,* 285 S.W. 65 (Mo.).

small companies. Although life insurance companies are allowed to evaluate their policies on bases less stringent than the full net reserve, to enable them to meet the early incidence of expense, this privilege is denied to fire insurance companies.

To see the effect of the requirements upon a new company, assume that a new fire insurance company with a capital of $100,000 began on January 1st. During the year the policy premiums collected on one-year policies amounted to $100,000. Suppose that the acquisition expense was $30,000 (which would be quite low for the first year of business), and that the claims paid or accrued amounted to $45,000; there would remain a surplus of $25,000 on hand to be applied as the unearned premium reserve. But the state law specified that the company should have had one half of its premium income on one-year policies, or $50,000, in reserve; since it had only $25,000, its capital was impaired to the extent of $25,000. Originally only $100,000, the capital is now reduced to $75,000. So even if the law allowed a 20 per cent impairment of capital this company would not have met the legal requirements. From this illustration it can be seen that a reserve requirement may hamper the operation of a young fire insurance company to a very great extent.

At least two proposals for the modification of the existing system have been made. One is to divide the fire insurance reserve into two parts, one part to cover ordinary losses and be based upon average losses, and the other part to cover the conflagration hazard. The first part would then be a reserve based upon the *risk* of loss. There is no scientific method of ascertaining the reserve except by calculating the present value of future losses, a method which is at present impracticable because of the great diversity in classes of risks and the uncertainty of estimating the probability of future losses, an uncertainty far greater than in life insurance. In addition the frequent but irregular ocurrence of great conflagrations makes additional precautions necessary; but fatal epidemics, such as a wave of influenza, rarely disturb the even course of human mortality.

Another proposal is to define the required reserve as the highest of each of two amounts: (1) the gross unearned premium, less acquisition costs, or (2) an adjusted claim reserve based upon the application of the loss ratio to date to the unearned premiums, plus a percentage of the gross premium to cover expenses other than acquisition expenses. The arguments in favor of this method are: (1) that it will provide sufficient to pay the claims on the basis of actual loss ratio; (2) that it will give a truer picture of the company's financial status; (3) that the reserves released might be used as a conflagration or contingency reserve.

Further to stabilize insurance companies and prevent insolvencies, the states frequently require that both domestic and foreign companies make a deposit of approved securities with the state for the purpose of guaranteeing solvency. This sum, however, is usually inadequate as a reserve, and does not approach the unearned premium liability. A more stringent requirement than a "special deposit" in the form of a flat sum is one

that requires approved securities to an amount equal to the unearned premium liability. This serves the double purpose of subjecting the assets to close scrutiny and at the same time preventing fraudulent manipulation by placing this "trust fund" beyond the reach of the individual officers of the company.

Summary

I. The reserve is a liability representing the unearned portion of premiums collected in advance.
   A. Since the corresponding assets are not segregated, or identifiable, it is not a trust fund in the legal sense.
   B. Its purpose and past treatment, however, have given it this character in fact.

II. Purposes of the reserve
   A. From the standpoint of the state it is necessary in determining solvency of companies, although by a purely arbitrary method.
   B. From the standpoint of the insured it is a provision for future losses, for return of premiums on cancellations, and for reinsurance.
   C. From the company standpoint it is necessary to determine profits or losses.

III. Calculation of the reserve
   A. Since valuation of individual polices would be impracticable, unearned premiums are calculated as a pro rata portion of premiums received.
   B. A more accurate approximation is possible when necessary, by using a monthly instead of an annual basis for calculation.

IV. Financial importance of the reserve
   A. The reserves of fire insurance companies equal 30 per cent of the total liabilities and are represented by assets in the form of investments.
   B. Many small funds are combined to form a large fund for capital investment.
      1. Over 80 per cent of the investments are securities, about equally divided between bonds and stocks.
      2. The high proportion of securities is due to the desire for liquidity, the speculative possibilities of stocks, and the absence of restrictions.

V. State regulation of investments
   A. Limits the ways in which (a) capital, (b) reserve and (c) surplus may be invested, by defining the character of the permissible investments.
   B. Prescribes standards of valuation.
   C. Provides periodical examinations.

VI. Expenditures
   A. Those not devoted to investment are used for (a) losses, (b) expenses, (c) taxes, and (d) dividends.
      1. Special taxes collected are not used for purposes of supervision.

VII. Receipts and profits
   A. Underwriting profit is derived from insurance operations.
      1. It varies with incurred losses and earned premiums.
   B. Investment profit is derived from the income on stocks and bonds, and variations in the market price thereof.

VIII. Criticisms of the reserve requirements
   A. They are an unscientific estimate of future losses.
   B. They are based upon gross premiums, although the expenses have been paid before calculation of reserve is required.
   C. They make the rapid expansion of new companies difficult.

Readings

Williams, J. B., *The Theory of Investment Values.* Cambridge: Harvard University Press, 1938, Chap. XXIII.

Mowbray, A. H., *Insurance.* New York: McGraw-Hill Book Co., 1946, Chaps. XXIII, and XXIV.

Nesbit, C. F., "Reserves of Fire Insurance Companies," National Convention of Insurance Commissioners, 1916.

Dawson, M. M., "Fire Insurance Reserves." *Economic World,* September 15, October 6 and November 10, 1917.

Hoadley, O. A., "Annual Statements." *Lectures to Associate Members,* Fire Underwriters' Association of the Pacific, 1915.

Kulp, C. A., "The Test of Insurance Management." *Journal of American Insurance,* May, 1938.

Blanchard, R. H., "Investments of Insurance Carriers." *Journal of American Insurance,* November, 1932.

Chamber of Commerce of the United States, "Bulletin on Special Insurance Taxes," annually.

Mitchell, R. B., *Financial Analysis of Fire Insurance Companies.* Philadelphia: the author, 1937.

Problems

1. Is the definition of the reserve on the first page of this chapter consistent with the idea that the purpose of the reserve is to provide a fund for the payment of future losses?

2. Does the manner in which the fire insurance reserve is calculated insure (1) the solvency of the company? (2) a sufficient fund for reinsurance? (3) a fund sufficient for the payment of future losses? How does the fire insurance reserve compare with the life insurance reserve in these respects?

3. Why might a company reinsure the risks of another for less than the latter's reserve?

4. If the one-year premiums collected by a company are steadily increasing month by month, which is the more conservative basis for calculating the reserve, the annual basis or the monthly basis?

5. A newly organized company has a capital of $500,000 and a surplus of $200,000. It collects $300,000 in premiums on one-year policies and incurs losses of 30 per cent, acquisition expenses of 30 per cent and other expenses of 10 per cent of the gross premiums, during the first year of operation. It also earns $35,000 interest on the investment of capital and surplus and $5,000 interest on premiums. What is the profit or loss for the year? What is the "underwriting" loss?

6. A company collects $60,000 of premiums on one-year policies issued during the year, $18,000 premiums on three-year policies issued during the year, and $10,000 on five-year policies issued during the year. What is the required reserve on this business, computed on the annual basis, at the end of the year? At the end of two years, assuming no further business to be written? How long before all the premiums on each of these classes of business will be earned?

7. What would have been the reserve on the one-year policies ($60,000 of premiums) in Problem 6 at the end of the first year, on the monthly basis, if the one-year premiums were received as follows:

January	$1,440	July	$4,800
February	3,600	August	4,800
March	4,800	September	6,240
April	4,800	October	6,720
May	5,280	November	6,960
June	4,800	December	5,760
		Total	$60,000

8. Why do the laws restrict the extent to which a fire insurance company may invest in the stock of any one corporation? Why are restrictions on stock investment less stringent for fire insurance companies than for life insurance companies? Do fire insurance companies carry a larger or smaller per cent of assets in cash than life insurance companies?

9. Is the unearned premium reserve designed to cover conflagration losses? How is it expected that such losses will be met?

10. What are the arguments for and against taxing fire insurance companies 1 per cent of their gross receipts?

11. What is the calculation by which *earned* premiums are arrived at? Should underwriting profit be based on premiums received and losses paid or on premiums earned and losses incurred? Why?

12. Suppose the following figures for a fire insurance company:—

Total premiums received during year	$1,050,000
Losses paid during year	300,000
Loss expenses during year	30,000
Underwriting expenses during year	450,000
Unearned premiums, Dec. 31 of previous year	975,000
Unpaid losses, Dec. 31 of previous year	52,500
Unpaid loss expense, Dec. 31 of previous year	3,000
Unpaid underwriting expense, Dec. 31 of previous year	48,750
Unearned premiums, Dec. 31 of current year	900,000
Unpaid losses, Dec. 31 of current year	90,000
Unpaid loss expense, Dec. 31 of current year	2,250
Unpaid underwriting expense, Dec. 31 of current year	61,500

What is the underwriting gain or loss?

13. Why do investors sometimes consider that an increase in reserve of a fire insurance company contributes to increase the fire insurance company's earnings?

14. What would be the required reserve for the company described in Problem 5, if the second system suggested on page 508 were used? What would have been the underwriting profit or loss with this reserve system?