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Early Examples of Marine Insurance

I

THE problem of the origins of marine insurance is one of the most complicated and controversial questions in the history of business institutions. One cause of this confusion is the fact that the earliest documentary sources are often ambiguous and lend themselves to widely varying interpretations. The legal writers, who have done most of the research on the early history of insurance, have focused their attention upon certain documents of the late thirteenth and the early fourteenth centuries.¹ As these sources unfortunately give incomplete information, the results of all this research have been rather disappointing. The minute scrutiny with which the legal writers have examined the early documents has produced subtle and brilliant examples of textual criticism but has also given rise to conflicting theories which have confused the issues instead of clarifying them.

It is not the purpose of this study to resolve the subtle points of law on which the lawyers differ. On the contrary, in giving a general survey of the work that has been done on the early history of marine insurance, it will be

¹ English writers have been little interested in the history of insurance. The pioneering work on the subject, *Il Contratto di assicurazione nel medio evo*, was written in 1884 by the Genoese lawyer, Enrico Bensa. It is still the basic work, although more for the documents than for their interpretation. In his later book, *Francesco di Marco da Prato, notizie e documenti sulla mercatura italiana del secolo XIV* (Milan, 1928), Bensa gave additional examples of insurance contracts, but there are no new forms. The German professor of law, Levin Goldschmidt, in his *Universalgeschichte des Handelsrechts* (Stuttgart, 1891), made important contributions to the subject by using source material unknown to Bensa, such as the records of a Marseilles notary published by Louis Blancard, *Documents inédits sur le commerce de Marseille au moyen âge, contrats commerciaux du XIII^e siècle* (2 vols., Marseilles, 1884-85). The conclusions of these first writers were challenged by the more critical German scholar, Adolf Schaube, in his three brilliant studies: (1) "Die wahre Beschaffenheit der Versicherung in der Entstehungszeit des Versicherungswesens," *Jahrbücher für Nationalökonomie und Statistik*, LX (1893), 40-56, 473-509; (2) "Der Uebergang vom Versicherungsdarlehn zur reinen Versicherung," *ibid.*, LXI (1893), 481-515; (3) "Der Versicherungsgedanke in den Verträgen des Seeverkehrs vor der Entstehung des Versicherungswesens. Eine Studie zur Vorgeschichte der Seeverversicherung," *Zeitschrift für Social- und Wirtschaftsgeschichte*, II (1894), 149-223. Although his interpretation of the sources—those previously used and some he presented for the first time—sometimes shows an excess of ingenuity, Schaube is usually clear and convincing. His grasp of all the available material relating to the subject and his masterly analysis make his studies of permanent value. After him, interest in the subject declined. Discussion has flared up anew in recent years with the publication of a series of articles in legal journals by the Italians, Alessandro Lattes, Giuseppe Valeri, Riniero Zeno, and the Frenchmen, André E. Sayous and Jules Valéry. In his article "I Primordi dell'assicurazione attraverso il documento del 1329," *Rivista del diritto commerciale*, XXVI, Part 1 (1928), 600-41, G. Valeri gives a full bibliography on the early history of marine insurance and summarizes the views of the different writers. Only a few articles and one book (by Zeno) have appeared since Valeri wrote. These will be referred to in the course of this study.

frankly stated when the available evidence seems to a layman inconclusive. The business purposes for which the various forms of contracts could be used are my central interest. The significance of recently discovered material will be emphasized from the point of view of how marine insurance could be used in the affairs of medieval merchants. This new material includes notarial contracts of Palermo, dating from the first half of the fourteenth century, which shed additional light on some of the most debated points. To this Sicilian material will be added new information on insurance rates taken from a fifteenth-century ledger of a Florentine merchant.

II

Most authorities on the subject agree that marine insurance was unknown to Greek and Roman antiquity.² The first insurance contracts were made by Italian merchants of the Middle Ages to whom we apparently owe the invention of the bill of exchange, of double-entry bookkeeping, and of commercial banking, as well as other innovations in business procedure. The date of the earliest example of premium insurance is one of those moot questions on which the legal writers have failed to agree. Some of them consider certain ambiguous texts as sufficient evidence of the existence of premium insurance, but others are more cautious and question the value of anything that is not clear and explicit. At any rate, there is no doubt that genuine insurance was a product of the commercial revolution which occurred during the period from 1275 to 1325 or thereabouts.³

This period saw the decline of the traveling or caravan trade which centered in the fairs of Champagne, and the rise of a new type of business organization in which the "sedentary" or resident merchant was the central

² In addition to the works mentioned in note 1, see Wilhelm Silberschmidt, "Das Seedarlehen als Ausgangspunkt der Versicherung gegen Prämie," *Veröffentlichungen des Deutschen Vereins für Versicherungs-Wissenschaft*, Heft XXXVIII (May 1926), 9-16; Raffaele Cafiero, "Origine delle assicurazioni marittime," Convegno internazionale di studi storici del diritto marittimo medioevale, Amalfi, 1934, *Mostra bibliografica e Convegno internazionale di studi storici del diritto marittimo medioevale*, Atti, I (Naples, 1934), 73-79; Aldo Checchini, "I Precedenti e lo sviluppo storico del contratto di assicurazione," *Atti dell'Istituto Nazionale delle Assicurazioni* (Rome, 1931), III, 58-68. The only work that attempts to prove the existence of marine insurance in the ancient world is C. E. Trennery, *The Origin and Early History of Insurance* ("Studies in Economics and Political Science of the London School of Economics," LXXXVII, London, 1926). Trennery devotes less than half a page to medieval Italy, where marine insurance really developed. He ignores completely the works of Bensa, Goldschmidt, and Schaube on the subject.

³ Raymond de Roover, "The Commercial Revolution of the Thirteenth Century," a discussion of "Capitalism—Concepts and History" by N. S. B. Gras, *Bulletin of the Business Historical Society*, XVI, No. 2 (1942), 34-38.

figure.⁴ This new type of businessman tried to direct all his affairs from the countinghouse; he used partners, factors, or correspondents to represent him in foreign parts.⁵

The traveling merchant had felt little need for insurance. On land, he sought safety in concerted action with other traveling merchants. They journeyed to the fairs in armed caravans and banded together in hanses and universities for the protection of their rights in foreign lands. On sea, the traveling merchant accompanied his goods. He tried to protect himself against pirates and privateers by traveling in convoy. While he could thus "insure" (or protect) himself to a certain extent against the *risicum gentium*, there was not much he could do against the *risicum maris* or the perils of the sea. If the ship that carried him foundered or was smashed on the rocks, the traveling merchant often lost his life as well as his possessions. Since ships were frequently lost, any overseas venture involved great risks.

The traveling merchant did not always operate with his own capital. This was often supplied in whole or in part by a partner who stayed ashore. The partner also ran the risk of losing his investment in case of mishap, but he could avoid heavy losses by entrusting his money to different merchants traveling on different ships. In the Genoese notarial records of the twelfth and thirteenth centuries, there are many examples to show that such a policy of dividing the risk was actually followed by the capitalists who financed the trade with the Levant.

Partnerships between an investing partner who stayed at home and a managing partner who went abroad were generally formed for a round-trip voyage from Italy to the Levant. Usually the investing partner supplied all or most of the capital for the venture. If the goods were lost but the traveling merchant was saved, the latter had no residual obligations toward the partner who had supplied the funds. Both partners shared in the profits and in all the risks of the venture. The ownership of vessels was usually divided so that the burden of the risk was assumed by several individuals.⁶ Partner-

⁴ I use the word "sedentary" in the meaning attached to it by N. S. B. Gras. Some writers do not like this term but they have not been able to suggest a better one. See N. S. B. Gras, *Business and Capitalism; An Introduction to Business History* (New York: F. S. Crofts and Company, 1939), chap. iii.

⁵ The words "partners" and "correspondents" need no definition, but the word "factors" had a special meaning in the Middle Ages. It was used chiefly for salaried employees who served a merchant as agents abroad.

⁶ Eugene H. Byrne, *Genoese Shipping in the Twelfth and Thirteenth Centuries* (Cambridge: The Mediaeval Academy of America, 1930), pp. 12-19; Raffaele di Tucci, *Studi sull'economia genovese del secolo decimosecondo, La nave e i contratti marittimi* (Turin, 1933), pp. 24-49; Frederic C. Lane, *Venetian Ships and Shipbuilders of the Renaissance* (Baltimore: The Johns Hopkins Press, 1934), pp. 115 f.

ship contracts thus permitted a division of risk, but they did not provide for a transfer of risk. In order to shift risks, various forms of loan, exchange, and sales contracts were devised which in practice afforded some kind of protection akin to insurance.

One of these contracts originating in the business communities of the seaports was the sea loan or *foenus nauticum* by which an investor lent a given sum of money to a traveling merchant with the understanding that the loan would have to be repaid only if the ship returned safely to port (*sana eunte nave*).⁷ Such a loan could have afforded complete protection only if the borrower had refrained from investing the amount received in a mercantile venture and had kept the specie locked up on land. In actual practice the proceeds of sea loans were usually invested in overseas ventures by the borrowers. If the ship did not return, the borrower or his heirs had no contractual obligations toward the lender. While the sea risk was transferred to the lender, he assumed no responsibility for poor business management. In other words, he did not share in the profits of the venture; his return was limited by the difference between the amount of the advance and the amount repayable upon safe arrival of the ship.

Sea loans were not made *gratis et amore*, even when the contract so stipulated, but the lender received interest and a compensation for the risk, probably by withholding part of the sum named in the contract. For this reason, the sea loan fell under the suspicion of usury and was condemned in 1236 by Pope Gregory IX in his decretal *Naviganti*. Whether or not this decretal produced a decline in the number of sea loans is a disputed point.⁸

Either because of the opposition of the church or, more likely, because of changes in business methods, the popularity of the sea loan declined in the thirteenth century in favor of the *cambium nauticum* or maritime exchange contract, which differed from the ordinary exchange contract (*cambium*) in one important respect: in the case of the *cambium nauticum*, the fulfill-

⁷ On the sea loan, see Goldschmidt, *Universalgeschichte*, pp. 345-54, and Calvin B. Hoover, "The Sea Loan in Genoa in the Twelfth Century," *The Quarterly Journal of Economics*, XL (1925-26), 495-529. This article is not entirely reliable. The medieval sea loan should not be confused with the "bottomry loan," which is, strictly speaking, a loan made by a shipmaster for repairs to his ship in a foreign port. Such a loan is contracted by the master but is repayable by the owners, if the ship reaches its destination.

⁸ Hoover ("The Sea Loan," pp. 499 f., 529, n. 1) questions whether the decree *Naviganti* had any appreciable effect on the decline of the sea loan, but Riniero Zeno believes that Gregory IX's decretal was responsible for the popularity of the *cambium nauticum*, which did not fall under the usury prohibition since such a contract could not be classed as a *mutuum*.—Riniero Zeno, *Storia del diritto marittimo nel Mediterraneo* (Catania, 1915), pp. 160 f. This is also the opinion of Adolf Schaube, "Der Versicherungsgedanke in den Verträgen des Seeverkehrs," *op. cit.*, pp. 176 f.

ment of the contract, instead of being unconditional, was contingent upon the safe arrival of the goods pledged in security. The *cambium nauticum*, like any other exchange contract, involved a permutation of monies, since the sum advanced by the lender in local currency was repayable abroad in a different kind of specie. The permutation was made at a rate which included both interest and compensation for risk. Interest in the Middle Ages was always included in the price or rate of exchange, so that the lender or buyer of foreign exchange was bound to gain in most cases.⁹ The effect of the *cambium nauticum*, like that of the sea loan, was to shift the sea risk from the borrower to the lender. In general, the terms of the contract placed such a low valuation on the foreign monies that the charges to the borrower were not infrequently greater than the profits which he could make from the sale of the goods pledged as security.

As a means of insurance against risk, the *cambium nauticum* or maritime exchange contract had serious drawbacks. It forced the exporting merchant to "take up" money whether or not he was short of funds and to pay high for its use.¹⁰ The *cambium nauticum* shared this disadvantage with the *foenus nauticum* or sea loan. In addition, the *cambium nauticum* was repayable abroad in a foreign currency whereas the sea loan was repayable at the termination of a round-trip venture. Therefore, the *cambium nauticum* presupposes a more complicated organization of international trade, since the lender had to have a representative abroad who would collect the amount promised in the contract. Usually the borrower paid the representative or agent of the lender out of the proceeds from the sale of the wares brought overseas. Such a repayment limited the amount that was available for reinvestment in goods for the return voyage. Perhaps the merchant had an opportunity to borrow again by entering into another exchange contract providing for repayment in his home port, either conditionally (*cambium nauticum*) or unconditionally (*salvo in terra*).

The existence of such possibilities is evidence of the gradual emergence of an organized money market. This development was completed in western Europe by the middle of the fourteenth century. By this time, the transition

⁹ As Mr. de Roover has shown, the exchange contract always involved a credit transaction as well as an exchange transaction. Because of the usury prohibition, bills were not discounted, but interest was buried in the rates of exchange. Consequently, the banker's profit, instead of being certain, was uncertain because it was determined by the unpredictable swing of the exchange rates. See Raymond de Roover, "What Is Dry Exchange? A Contribution to the Study of English Mercantilism," *The Journal of Political Economy*, LII (1944), 250-66.

¹⁰ Schaube, "Der Uebergang vom Versicherungsdarlehn zur reinen Versicherung," *op. cit.*, p. 483.

from the traveling merchant to the sedentary merchant had taken place. The handbook of Pegolotti, written in the mid-fourteenth century, gives regular quotations of foreign exchange and the rates of brokerage charges on exchange contracts. Such charges were higher in the case of maritime exchange than in the case of ordinary exchange.

In the course of the fourteenth century, the ordinary *cambium* contract became much more popular than the *cambium nauticum*. The lending of money by the purchase of bills of exchange was almost exclusively in the hands of Italian merchant-bankers who were well provided with capital and who had representatives in the most important commercial centers. These merchant-bankers were not specialized. They combined trade, banking, and underwriting. They also bought and sold bills of exchange for others on a commission basis. To divide risk was the keynote of the business policy followed by the international merchant-bankers. The same policy was followed by the lesser merchants. The business risk was split by buying goods in joint account with other firms. The turnover of capital and, consequently, the profits were increased by borrowing additional funds, usually by selling bills of exchange. In most cases the merchant-bankers were lenders and the lesser merchants were borrowers. Since ordinary bills of exchange were payable in any event, some means had to be devised for shifting the sea risk, otherwise an unlucky borrower might find himself in dire straits with his bills reaching maturity and his goods at the bottom of the sea.

The increased use of bills of exchange for the financing of foreign trade thus created the need for a new type of contract. The merchant-bankers, who themselves operated with borrowed funds, were not willing to run any sea risk, and the borrowers whose commitments were unconditional had to find someone who would take over this risk. There is a close connection between the development of terminal partnerships, of the bill of exchange, and of premium insurance. They are all the result of the transition from the traveling trade to that which centered around the sedentary merchant.

The merchants, in their search for a new type of contract, did not immediately hit upon the idea of premium insurance. They experimented first with a form of contract, the so-called "insurance loan," which contained already several of the elements present in real marine insurance but proved to be unsatisfactory for the full coverage of risk. The expression "insurance loan," in accordance with the practice of the German and Italian writers, is used here for lack of a better term.¹¹

¹¹ The Germans use *Versicherungsdarlehn*; the Italians, *prestito a scopo assicurativo*.

The following three elements characteristic of real marine insurance are found also in the insurance loan: (1) the insured or borrower remained on land; (2) the goods insured were sent unaccompanied; (3) the loan was repayable not upon safe arrival of the ship (*sana eunte nave*) but upon the safe arrival of the borrower's goods (*mutuum ad risicum maris et gentium*). Naturally, this latter provision offered better protection to the borrower, since it could happen that his goods were missing even if the ship and most of its cargo made port.¹² For example, it sometimes occurred that part of the cargo was taken from a ship by pirates or assailing thieves and that the rest was left untouched.¹³

This provision regarding the safe arrival of the goods had already appeared in the maritime exchange contracts. It is also found in some late examples of sea loans.¹⁴ The insurance loan differs from these other contracts in that the lender was always a shipowner, and the borrower, a shipper.

The earliest known examples of insurance loans are found in some Palermo documents dating back to the end of the thirteenth century. As has been stated, these insurance loans were repayable only upon safe arrival of the goods shipped overseas and were granted by shipowners to merchants who remained ashore instead of accompanying their merchandise. If the goods did not arrive at destination, the shipowner would receive neither the freight nor the money advanced to the shipper before sailing. There has been much speculation among historians about the motives that prompted owners to increase their risk by granting loans, the repayment of which depended upon the safe arrival of the ship. Possibly shippers distrusted shipmasters and required additional guarantees when the goods were not accompanied. By making a loan to the shipper, the shipowner acquired an interest in the cargo entrusted to his care.

It appears from the surviving examples that insurance loans rarely covered the full value of the cargo, but only 25 or 30 per cent.¹⁵ The shipper

¹² This point is emphasized by Jules Valéry, "Les Contrats d'assurance au moyen âge," *Revue générale du droit, de la législation et de la jurisprudence*, XXXIX (1915), 472 f.

¹³ The case would be different if part of the cargo was sacrificed as a ransom in order to dissuade pirates from attacking and destroying the ship. In such a case there would be general average and the loss would have to be shared by all those concerned in the venture.

¹⁴ Some sea loans of Palermo, dating from 1287 to 1338, contain this clause. Riniero Zeno, *Documenti per la storia del diritto marittimo nei secoli XIII e XIV* (Turin, 1936), documents Nos. 10, 96, 97, 101, 103, 104, and 175. Examples as early as 1248 appear in the records of the Marseilles notary Almaric, first published by Louis Blancard, *Documents inédits sur le commerce de Marseille au moyen âge*. Valéry ("Les Contrats d'assurance," p. 477) gives the Latin text with a French translation of one of these Marseilles sea loans.

¹⁵ Zeno, *Documenti*, p. lxxxvi.

remained his own insurer for the remainder. Insurance loans were thus not satisfactory for the purpose of covering the risk completely. They were usually granted under the form of a *mutuum gratis et amore*, although there can be no doubt that the shipowner usually advanced less to the shipper than the latter was expected to repay. This premium could also be concealed by raising the freight charges or by adding something to them for “insurance,” as in a Palermo document of 1340 cited by Adolf Schaube.¹⁶

One of the earliest known examples of an insurance loan granted by a shipowner to the charterer of his ship is found in two deeds drafted by a notary in Palermo on May 12, 1287.¹⁷ On this day, two merchants of Barcelona sold to a Florentine named Vanni Chiandono a certain quantity of wine which was already loaded aboard a ship ready to sail from Palermo to Tunis. The parties agreed that the seller would assume one third, and the buyer, two thirds, of the risk of transportation to the seaport of Tunis or Aquilata.¹⁸ From then onward all risks were taken over by the buyer. On the same date another agreement was concluded between the buyer and Leonus de Vinders, owner of the vessel carrying the wine. According to this agreement, the freight charges, amounting to 300 units of gold (*miri doppi d'oro*), were payable at destination upon safe arrival of the ship. In addition the shipper confessed to having received from the shipowner or master a sum of 320 units of gold *ex causa mutui ad risicum maris et gentium*, that is, as a *mutuum* subject to the risks of the sea and of men of war. This loan together with the freight charges was due ten days after the vessel's safe arrival at the seaport of Tunis. Since the shipper did not accompany his goods, he must have had a representative in Tunis who could pay the charges. As security for the loan and the freight charges, the borrower pledged the cargo of wine, which apparently was to be released by the shipowner only if the contract was fulfilled.

¹⁶ Schaube, “Die wahre Beschaffenheit der Versicherung,” *op. cit.*, pp. 479–81. According to a contract dated 1340, the shipowner, upon safe arrival of the goods, was entitled to repayment of the loan made *gratis et amore* and to a certain sum *pro naulo et securitate* (“for freight and insurance”). Schaube believed that the term *securitate* in this context refers not to “insurance” but to an “assurance” given by the captain that specially good care would be taken of the cargo of grain. But according to the sea laws the captain was already bound to take proper care of the cargo. It seems logical to believe that the word *securitate* refers to the risk assumed by the shipowner in lending money to the shippers and in making its repayment contingent upon the safe arrival of the ship. Apparently a distinction was made between charges for transportation and charges for the assumption of risk. Cf. Zeno, *Documenti*, p. lxxxvii.

¹⁷ *Ibid.*, pp. 6–7, viii f.

¹⁸ *Ibid.*, pp. lxxxi f.

Until recently no examples of insurance loans prior to 1317 were known.¹⁹ The whole series of contracts, covering the period from 1287 to 1337, published by Riniero Zeno, from the Palermo notarial records, pushes this date back to 1287 and shows that insurance loans were far from being uncommon.²⁰

These Palermo contracts are interesting examples of that type of covenant which paved the way to real insurance (that is, risk assumed by third parties) but cannot be considered as such. The purpose of all agreements of that type was to shift the burden of the sea risk in whole or in part from one party to another: for example, from the buyer to the seller, from the shipper to the shipowner, or from the borrower to the lender, but not yet from the owner to third parties, later called underwriters.

III

Nobody knows exactly how or when real premium insurance came into existence. It is very doubtful that it developed directly out of any of the earlier contracts which shifted the risk from one party to another. The most plausible explanation is that, early in the fourteenth century, the rising sedentary merchants invented a new type of contract, when they discovered that none of the existing forms were quite satisfactory as a means of transferring and dividing sea risk. The merchants could hardly fail to learn from experience that goods arrived safely in most instances and that only a small percentage of all cargoes was lost. It was, therefore, possible to measure the risk with a fair degree of accuracy. Elaborate statistical information was not necessary, and it is not surprising that the underwriting of marine insurance became a sound business long before actuarial science gave the same standing to life insurance.

There are references to *securitas* or insurance in a number of documents of the early fourteenth century. The trouble is that the significance of the word *securitas* is not clear from the context. In the Middle Ages, this word

¹⁹ This contract of 1317 was an isolated example found by Schaube in the Pisan archives. It is described in his third article, "Der Versicherungsgedanke in den Verträgen des Seeverkehrs vor der Entstehung des Versicherungswesens," *op. cit.*, pp. 155 f. Before the discovery of this Pisan document, the only known examples of insurance loans made by shipowners were found in some later Sicilian documents published by Ferdinando Lioni, "Le Società dei Bardi, dei Peruzzi e degli Acciaiuoli in Sicilia," *Archivio storico siciliano*, XIV (1889), 189-230. They were discussed by Schaube in the first of his three well-known articles on the origins of marine insurance, "Die wahre Beschaffenheit," *op. cit.*, pp. 475-79.

²⁰ Zeno, *Documenti*, Nos. 44, 46, 57, 74, 111, 133, 140, 148, 150, 161, 162, 167, 168, 171, 173, and 183.

had not yet acquired a precise technical meaning but referred to all kinds of "assurances," safe conducts, or sureties. For instance, bribes would be paid for someone's "assurance" that a ship would not be attacked by privateers with whom this person had influential connections. Of course, payments for "assurances" of this kind are very different from insurance premiums.²¹ The ambiguity of the words *securitas*, *risicum*, and other similar expressions in early texts has given rise to a great deal of rather fruitless discussion.

One of the controversial texts is a passage in a statute, promulgated in 1318, regarding the port of Cagliari on the island of Sardinia. According to this statute, brokers were restrained from meeting ships in the outer harbor in order "to charter or to insure them" (*per naulegare u sigurare*).²² It has been argued that the word *sigurare* as found in this contract does not mean "to insure," but *may* mean "to secure." What "to secure" may refer to has not been clarified, however. Perhaps the purpose of the statute of Cagliari was to prevent ship brokers from forestalling competitors by racing to incoming ships in order to "secure" their business. Today, a ship broker still earns a living by representing shipowners in a port of call and by securing freight for their ships. The statute of Cagliari was probably a municipal ordinance that was designed to promote standards of fair competition among the ship brokers. Such an interpretation would at least make sense. It seems to me that the other interpretations which have been given are rather far-fetched and improbable.²³

Another discussion has raged around some entries in the account books of the Del Bene firm of Florence (1319–1320).²⁴ One of these entries relates to a shipment of Flemish and French cloth which was bought at the fairs of Champagne by the famous Bardi Company, acting as commission merchants for the Del Bene firm. According to an agreement, the Bardi undertook to deliver the cloth in Pisa at their own risk but at the buyer's expense. For assuming this risk, the Bardi charged 8.75 per cent extra on the total cost of the goods delivered in Pisa. As some of the cloth had been water-soaked, the Bardi agreed to a deduction for the damage. The extra charge of 8.75 per cent is called *rischio* in the accounts of the Del Bene firm. While

²¹ Schaub, "Die wahre Beschaffenheit," *op. cit.*, pp. 47–55; Alessandro Lattes, "L'Assicurazione e la voce 'securare' in documenti genovesi del 1191 e 1192," *Rivista del diritto commerciale*, XXV, Part 1 (1927), 64–73; *idem*, "Note per la storia del diritto commerciale," *ibid.*, XXXIII, Part 1 (1935), 185–91; *idem*, *Il Diritto marittimo privato nelle carte liguri dei secoli XII e XIII* (Vatican City, 1939), pp. 143–47.

²² Bensa, *Il Contratto*, p. 55.

²³ *Ibid.*, pp. 55–57; Schaub, "Die wahre Beschaffenheit," *op. cit.*, pp. 50–55; Checchini, "I Precedenti e lo sviluppo storico del contratto di assicurazione," *op. cit.*, pp. 71 f.

²⁴ The text of these entries was first published by Bensa, *Il Contratto*, pp. 183–89.

the word *rischio* had admittedly several meanings, it clearly refers in that context to a special charge or *premium* for the assumption of a risk.²⁶

There is a document which has created even a greater stir than either the statute of Cagliari or the Del Bene account books. This is the much discussed Grosseto document of 1329.²⁶ It is a receipt in notarial form given by a Genoese shipowner, Ottobono de Marini, to the representative of the Acciaiuoli Company, a Florentine firm of merchant-bankers, for (1) 1,450 florins representing freight charges from Tunis to Grosseto, a former port north of Civitavecchia, (2) 2,450 florins representing "insurance and risk" (*pro securitate et risico*), and (3) 272½ florins in the name of Gaspar de' Grimaldi, knight. There is no discussion about the first of these three items. And regarding the third item, there seems to be general agreement that it is the price of a safe-conduct obtained through Grimaldi from some Ghibelline privateers who were combing the Tyrrhenian Sea for Guelf shipping. Since the shippers were Florentine Guelfs, their cargo was in danger of being seized, if intercepted by the Ghibellines. All the discussion centers around the second item of fl. 2,450 for *securitate et risico*. Some believe that this amount is really an insurance premium. The fact that this supposed premium is so high is explained by the state of war and the presence of the Ghibelline fleet.²⁷ Others reject this theory and contend that the sum of 2,450 florins refers to the repayment of an insurance loan made by Ottoboni de Marini, shipowner, to the Acciaiuoli Company, shippers.²⁸ They point out that insurance premiums are always payable in advance and not after safe arrival of the insured cargo at the port of destination. Another argument is that a premium of 2,450 florins is improbably large, even if one considers the danger from privateers and the high value of the cargo, which was composed of leather, wool, and lamb fells. Both of these conflicting theories are plausible on the basis of what is known. I believe that it is impossible to disprove either theory without more information than is now available.

²⁶ Schaube dissents even from this interpretation ("Die wahre Beschaffenheit," *op. cit.*, pp. 494-501), but I am inclined to believe that in this instance he is hypercritical.

²⁷ This document was first published by Bensa, *Il Contratto*, pp. 190 f.

²⁸ This is the opinion of Giuseppe Valeri, "I Primordi dell'assicurazione attraverso il documento del 1329," *op. cit.*, pp. 600-41. He dissents from everyone else in believing that the third item refers to reinsurance rather than to some kind of safe-conduct secured through the offices of Grimaldi. Checchini agrees with Valeri concerning the meaning of the second item but with Schaube and others concerning the third item.—"I Precedenti," *op. cit.*, pp. 73-79.

²⁹ This opinion is represented by Schaube, "Die wahre Beschaffenheit," *op. cit.*, pp. 40-47, 504-9. André E. Sayous criticizes Schaube for displaying too much ingenuity and for being overcritical.—"L'Histoire universelle du droit commercial de Levin Goldschmidt et les méthodes commerciales des pays chrétiens de la Méditerranée aux XII^e et XIII^e siècles," *Annales de droit commercial français, étranger et international*, XL (1931), 314-16.

Until recently no insurance policies in undisguised form earlier than 1384 were known to be extant. The publication by Zeno of several premium-insurance contracts drawn up in Palermo in 1350 by the notary Stefano de Amato shows that marine insurance had already reached the stage of maturity at a much earlier date than was hitherto believed. Since Palermo was one of the less important commercial centers, it is possible that marine insurance was practiced before 1350 in more important centers, such as Pisa, Florence, and perhaps Venice.

The first of the Palermo insurance policies is dated March 15, 1350. From its contents it appears that a Genoese merchant, Leonardo Cattaneo, underwrote or insured (*assecuravit*) a shipload of wheat, belonging to one Benedict de Protonotaro of Messina, up to the amount of fl. 300 for a voyage from Sciacca, on the island of Sicily, to Tunis. Leonardo Cataneo declared that, from the time of the ship's sailing from Sicily until its safe arrival in Tunis, he would assume all risks arising from an act of God or of men and from the perils of the sea (*omni risicum, periculum et fortunam Dei, maris et gentium*). The sum of fl. 300 was due one month after receiving "certain" news of the cargo's loss. If the loss was only partial, the insurer's responsibility would be commensurate with the extent of the damage. The premium was 54 florins or 18 per cent. It was clearly stated that the contract was concluded for purposes of insurance (*ex causa assicurationis*) and that the underwriter had received from the insured the 54 florins "for that insurance" (*pro qua securitate*).²⁹

The second insurance policy published by Zeno is of the same date as the first and also concerns a shipment of grain from Sicily to Tunis, but on another ship. In addition to covering this risk on the outbound voyage, the insurers were answerable in case of disaster to the return cargo which was to be bought with the proceeds from the grain. The premium for the round-trip voyage was 4½ ounces of gold on an insurance of 30 ounces of gold or 15 per cent. It is not clear why the premium was lower for the round trip than for the single voyage from Sicily to Tunis; perhaps one vessel was more seaworthy than the other.³⁰

A third insurance policy resembles the second and also relates to a round-trip voyage between Sicily and Tunis. The premium this time is 20 per cent. The third contract stipulates that the destination of the insured cargo may not be changed except for reasons of emergency.³¹

²⁹ Zeno, *Documenti*, pp. 229–30, No. 190.

³⁰ *Ibid.*, pp. 230–31, No. 191.

³¹ *Ibid.*, pp. 242–43, No. 202 (*viaggio non mutato absque iusto impedimento Dei, maris et gentium*).

A fourth contract published by Zeno does not concern the insurance of a cargo but that of the ship itself with all its tackle and apparel (*eius guarnimentis et corredo*). This contract also covers the freight charges which were usually payable at destination and which the shipowner would not be able to collect if the loss of his ship prevented the delivery of the cargo to the consignees. The premium stipulated in the policy is 14 per cent for a voyage from Palermo to Tunis via Sciacca and back to Palermo with calls at Mazara and Trapani. No deviations were allowed except in case of emergency.³²

The Palermo insurance contracts are significant because the nature of the agreement is stated in plain and straightforward language. Such is not the case in some contemporaneous Genoese contracts where the real purpose of the contract is cloaked in the disguise of a *mutuum gratis et amore*, that is, a loan without interest. For example, in one contract dated October 23, 1347, the insurer named Giorgio Leccavello acknowledged having received a sum of £107 Genoese from one Bartolomeo Basso *in mutuo gratis et amore* and promised to repay this amount unless a cog named Santa Clara, ready to sail from Genoa, reached safely the island of Majorca. In other words, if the vessel arrived safely at its destination the contract would be null and void. It was also agreed between the parties that the contract would be voided if the Santa Clara did not sail from Genoa or if it accomplished another voyage and was found within six months to be safe in any other part of the world.³³ The contract is deceptive in that the insurer, it is evident, never borrowed any money. It was, therefore, necessary to stipulate that he would not avail himself of the exception *non numerate pecuniae*, which allowed the borrower to repudiate any obligation by taking an oath that he had not received the full amount specified in a loan contract, in other words, that the contract was usurious. In contrast to the Palermo contracts, the amount of the premium is not stated.

The contract concerning the cog Santa Clara is not the only one of its kind. It was a common practice in Genoa to disguise an insurance contract under the form of a loan contract. In the case of a shipment of alum from Genoa to Sluys, the seaport of Bruges, the insurer was a merchant named Niccolò Cattaneo. By a notarial act dated March 9, 1350, he acknowledged having received from Matteo Ardimento an amount of £250 Genoese *in mutuo gratis et amore* and promised to repay this amount with the reservation that this obligation would be canceled if the shipment of alum was safely unloaded in the seaport of Sluys. It was further provided that, if the alum was

³² Zeno, *Documenti*, pp. 233–34, No. 194.

³³ The text of this contract was published by Bensa, *Il Contratto*, pp. 192–93, Doc. No. III.

transshipped in Lisbon, the insurer would bear all risks.⁸⁴ This provision alone shows clearly that the whole purpose of the contract was the assumption of certain risks and not the acknowledgment of a debt, as superficial reading might suggest.

The form of these early Genoese insurance contracts naturally reminds the reader of the sea loan, also disguised as a *mutuum gratis et amore*. In both cases, it was stated that the loan was made without interest and that the borrower had actually received the full amount stipulated in the contract, although neither statement was true. In both cases, the loan was to be repaid only under certain conditions. But here the similarity ends. In the sea loan, it was the *insured* who promised to repay, if a certain ship arrived safely, a sum of money of which he had actually received the greater part. In the Genoese insurance contract, the situation was reversed. It was the *insurer* who promised to repay a sum of money, which he had *not* actually received, if a certain ship did *not* arrive safely. Thus the Genoese contract represents a complete reversal of the earlier relations between insurer and insured: instead of the insured repaying to the insurer a real loan, the insurer promised to pay the insured a certain sum of money in case of sea disaster. Here we have real insurance, however much disguised under the form of a loan. The omission of any reference to a premium was unimportant. The premium was probably handed over by the insured to the insurer before the contract was drawn up by the notary. The insured needed no receipt because nothing in the contract would permit the insurer to claim the premium anew. The insurer had the premium in his pocket, hence he needed no written evidence of its payment.

Historians have asked themselves why the Genoese notaries persisted in cloaking new forms in an old garb. Some have suggested that the Genoese notaries and merchants were more subservient to the teachings of the church with regard to usury than those of other commercial centers.⁸⁵ But I should hesitate to give the Genoese a certificate of piety and subservience to the church. It is much more likely that the insurance contract was developed independently in several Italian seaports at about the same time, but that there was at first no uniformity in business procedure and legal forms.⁸⁶ This

⁸⁴ Published by Bensa, *Il Contratto*, pp. 196–97, Doc. No. VI. For other examples, see Docs. Nos. IV, V.

⁸⁵ See Schaube, “Der Uebergang vom Versicherungsdarlehn,” *op. cit.*, p. 497, and the comments of Valeri, “I Primordi,” *op. cit.*, pp. 629–30.

⁸⁶ Valeri (“I Primordi,” *op. cit.*, p. 629) credits the Florentines with the invention of insurance, but this is an assertion difficult to prove, since the earliest Florentine insurance policies are later than the Genoese and Palermo insurance contracts in notarial form. Moreover, in the Palermo contracts of premium insurance published by Zeno, the insurers are in all four cases Genoese.

explanation is the more plausible in that local differences existed also in fields other than insurance. For example, the Genoese continued to use Latin much longer than either the Venetians or the Florentines, not only in drafting contracts but also in bookkeeping and in writing business letters of an informal character.

After 1365 the *mutuum* or pseudo-loan form of insurance contract became less and less popular in Genoa, but still insurance was not treated as a contract *sui generis*. Instead insurance was dressed up as a contract of purchase and sale (*emptio venditio*) in which the insurer appeared as the buyer and the insured as the seller. The purchase was not unconditional since the insurer promised to buy the insured goods *only in case they did not arrive safely* at a certain port.³⁷ This type of contract had the advantage of giving the insurer after payment an unquestionable title to the insured goods if they were salvaged after having been lost.³⁸

There is perhaps another reason for the shift from the *mutuum* (pseudo-loan) to the *emptio venditio* (pseudo-sale) form of contract. A *mutuum* was always a contract that laid itself open to the suspicion of usury. It is possible that some Genoese insurers sought to evade their obligations by pleading in ecclesiastical courts the exception *non numerate pecuniae* in spite of the fact that they were bound by contract not to avail themselves of this exception.³⁹ At any rate, the Genoese Doge Gabriel Adorno, by a decree promulgated in 1369, tried to put an end to the evasion of contractual obligations by frivolous litigation in ecclesiastical or other courts. The Doge's decree applied especially to matters of insurance and exchange. Merchants who refused to carry out the terms of their contracts were threatened with a fine of 10s. for every pound the payment of which was called into dispute.⁴⁰ Whether or not the Doge's decree was effective is a matter of conjecture.⁴¹ Insurance contracts in the form of a *mutuum* did not disappear entirely after 1369.⁴² But the Genoese jurisconsult Bartolomeo Bosco defined the

³⁷ For examples, see Bensa, *Il Contratto*, p. 200, Doc. No. VIII (contract of July 12, 1370) and p. 225, Doc. No. XVII (November 16, 1426).

³⁸ W. S. Holdsworth, *A History of English Law* (London, n.d.), VIII, 277, n. 7.

³⁹ Enrico Bensa, "Ancora sopra una singolare formola negli atti notarili genovesi nel medio evo," *Rivista del diritto commerciale*, XXV, Part 1 (1927), 142-44.

⁴⁰ The text of this decree was first published by Bensa, *Il Contratto*, pp. 149-51, Statutes, No. I, and republished by Placido Civiletti, "Origini dell'assicurazione," *Convegno internazionale di studi storici del diritto marittimo medioevale*, Amalfi, 1934, *Mostra bibliografica e Convegno internazionale di studi storici del diritto marittimo medioevale*, Atti, I (1934), 127, n. 7.

⁴¹ Schaubé believes that the Doge's decree was instrumental in bringing about the shift from the *mutuum* to the *emptio venditio* form of contract.—"Uebergang vom Versicherungsdarlehn," *op. cit.*, p. 494.

⁴² Cafiero, "Origine delle assicurazioni marittime," *op. cit.*, p. 105.

insurance contract as an *emptio venditio* subject to the resolutive condition of safe arrival.⁴³ Even for life insurance the Genoese used a form of contract resembling a sale; examples appear as late as the fifteenth century.⁴⁴ There can be no doubt that this form was preferable to the *mutuum* as long as insurance was not recognized by the jurists as a contract *sui generis*.⁴⁵

IV

After premium insurance was well established in business practice, there were sharp differences in the way the contracts were drawn. In Genoa, as we have seen, it was customary to have notaries prepare insurance contracts. At first this practice made it necessary to draw up a separate contract for each underwriter who agreed to take a share in a given risk.⁴⁶ Later on, this cumbersome practice was simplified by the notary's making only one contract which included and listed all the underwriters who had a share in the risk.⁴⁷

The Genoese and Sicilian practice—still found in Antwerp in the sixteenth century—of having notaries draw up insurance contracts was not followed in other seaports like Pisa and in interior cities like Florence. In those two commercial centers, insurance policies were made out by brokers who passed them around to merchants willing to underwrite part of the risk. Thus, a Florentine insurance policy, dated July 10, 1397, found in the Datini Archives, bears the names of eleven underwriters who, together, were answerable for 2,100 florins. The size of individual subscriptions in this policy ranged from 100 to 300 florins.⁴⁸ It was not always easy to collect subscriptions. According to another Florentine insurance policy taken out by Francesco Datini, it took the broker almost a month (April 26

⁴³ Bensa, *Il Contratto*, p. 73; Schaube, "Uebergang vom Versicherungsdarlehn," *op. cit.*, p. 495.

⁴⁴ For examples, see Bensa, *Il Contratto*, pp. 228–29, Doc. No. XIX (April 10, 1427); pp. 232–33, Doc. No. XXII (January 5, 1428); pp. 234–35, Doc. No. XXIII (November 15, 1430).

⁴⁵ The jurists of the sixteenth and seventeenth centuries considered the insurance contract as a *contractus innomatus*, that is, a special contract not named in Roman law. Zeno, *Storia del diritto marittimo*, pp. 169 f.

⁴⁶ This observation applies both to the four Palermo contracts published by Zeno and the early Genoese contracts published by Bensa.

⁴⁷ See Bensa, *Il Contratto*, pp. 228, 232–35, 236.

⁴⁸ This policy for insurance on six bales and one fardel of silk veils, shipped from Motrone to Aigues Mortes, was published in Bensa, *Il Contratto*, pp. 217–20, Doc. No. XIV, and reprinted in Florence Edler [de Roover], *Glossary of Mediaeval Terms of Business, Italian Series, 1200–1600* (Cambridge: The Mediaeval Academy of America, 1934), pp. 34–35. Bensa misread the florin sign as that of the scudo, an error I discovered only in 1938, while photographing the original document in the Datini Archives. Throughout the contract "scudi" should read "florins." Other errors in Bensa's transcription are less serious.

to May 20) to find underwriters for a risk of 1,250 florins on wool and leather shipped from Majorca to Venice in 1396. Seven merchants signed up and then canceled their subscriptions with the result that the broker had to approach other merchants. Finally the risk was covered by fourteen different underwriters with subscriptions ranging from 50 to 200 florins.⁴⁹ When the amount of the risk was small, policies were underwritten by one to four merchants. Individual underwriters rarely answered for more than 200 florins.

Among the many insurance policies in the Datini Archives, which contain the business records of Francesco Datini (*ca.* 1335–1410),⁵⁰ there are two different forms of policy: one popular in Florence and the other in Pisa. There is no essential difference between the two types, but they vary somewhat in wording and arrangement. For instance, in the Pisan policies, the names of the insurers are mentioned twice: once at the beginning and again at the end of the contract, where the subscriptions appear. The Florentine policies, on the contrary, do not begin with the list of the underwriters. Their names are mentioned only once—in the subscriptions at the bottom of the instrument.

The Florentine and Pisan brokers wrote the policies in Italian, whereas the Genoese and Palermo policies are in Latin, the language used by notaries. The Florentines usually state first the date of the contract, the name of the insured, the sum insured, the nature of the insured goods (or the name of the insured vessel), the name of the vessel on which they are loaded, the name of the master, the port of shipment or of sailing, and the port of destination.⁵¹ Sometimes there is an additional statement to the effect that the insurers are entitled to keep one half of one per cent of the sum insured, if the vessel should sail without having on board the goods described in the policy.⁵² The contract usually stipulates that the insurers agree to assume the risks which “are of God, of the sea, of men of war, of fire, of jettison, of detainment by princes, by cities, or by any other person, of reprisals, of arrest, of whatever loss, peril, misfortune, impediment or sinister that might

⁴⁹ Prato (Tuscany), Archivio Datini, No. 1159, Assicurazioni marittime.

⁵⁰ Bensa, *Francesco di Marco da Prato*, is a biography of Datini, a native of Prato (Tuscany), who was one of the most prominent merchant-bankers of his time. The only study in English is Robert Brun, “A Fourteenth-Century Merchant of Italy: Francesco Datini of Prato,” *Journal of Economic and Business History*, II (1930), 451–66.

⁵¹ For the text of such a contract, see the references in note 48.

⁵² This clause is found, e.g., in a policy of May 16, 1396, relating to a shipment from Venice to Majorca: “E se lla detta roba non si charichase in sulla detta nave, che gli asichuratori ebino s. 10 a oro per cento [fiorini], si veramente che lla detta nave facia il detto viaggio.”—Archivio Datini, No. 1159, Assicurazioni marittime. Cf. a similar clause in the Pisan contract of 1384, Bensa, *Il Contratto*, p. 211.

occur, with the exception of packing (*stiva*) and customs," until the insured goods are safely unloaded at destination.⁵³

The contract goes on to state that the sum insured is due two months after receiving certain news of any mishap or disaster. If no tidings at all are received, the cargo or the ship is presumed lost after six or more months (depending upon the length of the voyage) from the date of the contract.⁵⁴ Should the cargo arrive safely after payment of the insurance in default of news, then the sum paid would have to be refunded by the insured to the insurers.⁵⁵ The safe arrival of the insured goods frees the insurers from all obligation. In some contracts, but not in all, barratry of the master is explicitly mentioned among the risks assumed by the insurers. From the enumeration given above, it is evident that defects in packing and confiscation by customs officials for faulty declaration or nonpayment of duties are not covered by medieval insurance policies. As today, thefts committed by the master or the crew were not covered by insurance, either, but gave rise to claims against the owners of the vessel or to a refund on freight charges.⁵⁶ In the Middle Ages more ships were lost through seizure by pirates or privateers than through storm, bad weather, collision, or other accidents. Since the high seas were unsafe because of latent warfare and piracy, insurance policies always covered the *risicum gentium* as well as the *risicum maris*. Today, according to the York-Antwerp Rules, the risk of war is not covered by marine insurance unless expressly specified.

Because medieval policies covered losses due to war as well as those due to other accidents, and because shipwrecks in the Middle Ages were comparatively more frequent than today, it is not surprising that insurance premiums were much higher then than they are now. The rate of the premium varied not only according to distance but also according to the seasons of the year (whether summer or winter), the state of war or peace, the reported presence or absence of pirates along the sea lanes, the type of

⁵³ *Ibid.*, pp. 217–18; Edler, *Glossary*, p. 34.

⁵⁴ Six months for a voyage from Motrone, the seaport of Lucca, to Aigues Mortes (Bensa, *Il Contratto*, p. 218) but ten months for a voyage from Porto Pisano to Barcelona or from Venice to Valencia (Archivio Datini, No. 1159, Assicurazioni marittime).

⁵⁵ Today, the insurers, having acquired title to the insured goods, would simply sell them and recover what they paid from the proceeds of the sale.

⁵⁶ Large navigation companies today have a special claims department which handles the claims of shippers for shortages. If a bill of lading mentions ten boxes but only nine are unloaded at destination, the carrier is responsible, unless he can prove that the missing box was lost by the perils of the sea. Gerard de Malynes observes in connection with theft on shipboard by members of the crew that "the master of the ship is to answer for that and to make it good so that the assurances are not to be charged with any such losse which is sometimes not observed."—*Lex mercatoria* (1st ed.; London, 1622), Part I, chap. xxv, p. 151.

vessel (whether a galley or a cog), and other circumstances.⁵⁷ As indicated by entries in a memorandum book kept by Francesco Datini's branch office in Pisa, the rate was 8 per cent for a voyage from Cadiz to Sluys or Southampton (*Antona*), 3 or 4 per cent for voyages from Peñíscola (a small port between Barcelona and Valencia) to Porto Pisano, 4 per cent for voyages from Porto Pisano to Naples or to Tunis, and 4 or 5 per cent for voyages from Porto Pisano to Barcelona or to Palermo. All these rates applied to marine insurance contracted in August and September 1384.⁵⁸ By the terms of a policy dated May 10, 1396, the rate was only 3 per cent, instead of the higher rates in 1384, on a shipment from Porto Pisano to Barcelona. In December 1399, 7 per cent was charged for insuring nine bales of "grain" (a red dyestuff) shipped from Valencia to Venice.⁵⁹ Uzzano, the author of a famous manual for merchants written in 1442, states that the premium from London to Pisa varied between 12 and 15 per cent, and "occasionally even higher when there were rumors about dangerous corsairs."⁶⁰ According to the account book of Jacomo Badoer, a Venetian merchant residing in Constantinople in the 1430's, insurance rates were 6 per cent for a voyage from Constantinople to Venice and from 8 to 10 per cent for the shorter trip from Constantinople to Ancona.⁶¹ Distance, therefore, was by no means the only factor that determined the rate of an insurance premium.

The private account books of Bernardo Cambi, a Florentine merchant of the fifteenth century, contain a large number of entries relating to marine insurance.⁶² Cambi resided in Bruges from 1435 until 1450, when he returned to Florence. Both before and after his return to his native city, he was active as an underwriter. A glance at Table 1, based on entries in his account books, shows that insurance rates were definitely lower on shipments sent by the

⁵⁷ Malynes, *Lex mercatoria*, Part I, chap. xxiv, p. 150.

⁵⁸ Bensa, *Francesco di Marco da Prato*, pp. 397-99.

⁵⁹ Archivio Datini, No. 1159.

⁶⁰ Giovanni da Uzzano, *La Pratica della mercatura*, Vol. IV of Giovanni Francesco Pagnini, *Della Decima e di varie altre gravetze imposte dal comune di Firenze, della moneta e della mercatura de' Fiorentini fino al secolo XVI* (Lisbon-Lucca, 1765-66), p. 119: "E per sicurtà di mare da Londra a Pisa sempre è da fiorini 12 in 15 per 100 di valuta, e quando più, secondo i pericoli che sentono o di corsali o d'altro."

⁶¹ Vittorio Alfieri, *La Partita doppia applicata alle scritture delle antiche aziende mercantili veneziane* (Turin, 1891), p. 97.

⁶² The author had the privilege of examining the Cambi account books in 1938. At that time, these records were in the possession of Mr. Otto Lange of Florence. Later they became the property of Prince Piero Ginori Conti. The Cambi records include two ledgers of Bernardo Cambi, one for the years 1435-59 and the other for 1470-90. An interesting comparison is that between the rates in Cambi's records and those listed by Malynes in his *Lex mercatoria* (1622), Part I, chap. xxiv, p. 150.

galleys than on those moved by other vessels.⁶³ The most important galleys, about 1470, were the Venetian, the Genoese, and the Florentine galleys of the Levant and of the Ponent, but the account books of Cambi also refer to insurance taken out on the Catalan, the Burgundian, and the Ferrandine galleys.⁶⁴ Underwriters did not consider these galleys as safe as those of Florence or Venice and charged slightly higher rates, but still less than when goods were shipped in a nef (*nave*), a carrack, a caravel, or other craft.⁶⁵ The reason why underwriters discriminated in favor of the galleys was apparently that they were larger, swifter, better manned, usually sailed in consort, and were less likely to be attacked by pirates or privateers than ordinary medieval trading vessels.⁶⁶ While insurance rates were lower, freight charges were higher on the galleys than on other vessels.⁶⁷ The same is true today: a shipper pays less for freight and more for insurance on an old tramp steamer than on an up-to-date motor vessel operated by a regular line.

Besides the galleys, the account books of Bernardo Cambi mention other vessels which made regular trips, for example, "the Portuguese nef which brings malmsey to Flanders."⁶⁸ But the rate was rather high on this ship: 11 per cent for the voyage from Madeira to Sluys, the seaport of Bruges.

Insurance rates were sensitive to bad news, as is shown by an excellent example in the Cambi records. The two Burgundian galleys enjoyed good standing with the underwriters, who charged only 4 per cent for the trip from Zeeland to Porto Pisano, according to an entry dated April 26, 1473.⁶⁹ Unfortunately, while crossing the North Sea from Flanders to England, one of the two galleys was seized on this very trip by the Danzig privateer, Paul Beneke.⁷⁰ The other galley escaped and called at Southampton to load addi-

⁶³ The list given in Table 1 is selective and is far from including all the Cambi entries relating to insurance.

⁶⁴ The Burgundian galleys were two galleys built for the duke of Burgundy and operated by the Medici under the Burgundian flag, that is, the flag of the Low Countries bearing at that time a St. Andrew's cross raguly. The Ferrandine galleys belonged to, and flew the flag of, King Ferrando of Naples.

⁶⁵ Lane, *Venetian Ships*, p. 25.

⁶⁶ Andrea Barbarigo, a fifteenth-century Venetian merchant, learned to his cost about the dangers of sending wares by cog instead of by galley.—Frederic C. Lane, *Andrea Barbarigo, Merchant of Venice, 1418-1449* (Baltimore: The Johns Hopkins Press, 1944), p. 56.

⁶⁷ *Ibid.*, p. 56; Lane, *Venetian Ships*, p. 25; Aloys Schulte, *Geschichte der grossen Ravensburger Handelsgesellschaft, 1380-1530* (Stuttgart, 1923), II, 65-72.

⁶⁸ Cambi Ledger, 1470-90, fol. 58^r: "Sichurtà deon avere. . . . E di 12 d'ottobre fl. 5 s. 10 auto dal bancho per sichurtà di fl. 50 sulla nave portoghallese che porta le malvagie in Fiandra,"

⁶⁹ *Ibid.*, fol. 66^r. The text specifies "sulle due ghalee di Borghongna."

⁷⁰ The captured galley carried Hans Memling's "Last Judgment," a famous painting in the Marienkirche in Danzig. See my article, "A Prize of War: A Painting of Fifteenth Century Merchants," *Bulletin of the Business Historical Society*, XIX, No. 1 (February 1945), 3-12.

TABLE 1
MARINE INSURANCE RATES IN PERCENTAGE OF AMOUNT INSURED
ACCORDING TO THE ACCOUNT BOOKS OF THE
FLORENTINE MERCHANT BERNARDO CAMBI

Kind of Vessel	From	To	Rate in Per Cent	Date of Entry in Cambi's Ledger
French galleys	Alexandria	Porto Pisano	4.0	December 17 1472
Ferrandine galleys	Alexandria	Porto Pisano	5.0	October 12 1475
<i>Baleniera</i> of the duke of Burgundy	Barcelona	Sluys (Bruges)	14.5	April 15 1454
No record	Cadiz	Genoa	4.5	January 16 1454
French galleys	Chios	Porto Pisano	5.0	April 30 1470
Nef carrying alum	Civita Vecchia	Flanders	12.0	May 10 1473
French galleys	Collioure	Naples	3.0	November 21 1472
Florentine galleys	Collioure	Porto Pisano	1.5	April 11 1470
French galleys	Collioure	Porto Pisano	2.0	October 15 1472
Florentine galleys	Constantinople	Porto Pisano	3.0	March 9 1472
Ferrandine galleys	Constantinople	Porto Pisano	7.0	June 20 1470
Nef of the king of England	England	Porto Pisano	8.0	January 18 1477
French (?) nef	Gascony	Sluys	10.0	April 15 1454
Genoese nef	Genoa	Downs of England	10.0	January 16 1454
Nef (nationality unknown)	Genoa	Downs of England	9.0	June 18 1470
Genoese <i>baleniera</i>	Genoa	The Thames	10.0	April 11 1472
No record	Iviza	Porto Pisano	5.0	August 11 1473
Flemish nef carrying wine	La Rochelle	Sluys	14.0	December 31 1454
Flemish nef	La Rochelle	Sluys	14.0	January 14 1455
<i>Baleniere di San Regnere</i>	La Rochelle	Sluys	14.0	February 4 1455
Biscayan (?) nef	La Rochelle	Sluys or Zealand	10.0	February 4 1455
Genoese nef	Lisbon	Porto Pisano	8.0	March 9 1472
Portuguese nef	Lisbon	Porto Pisano	8.0	June 17 1472
Portuguese nef	Lisbon	Sluys	10.0	January 10 1472
Five Zealand nef	London	Zeeland	3.0	February 4 1455
Portuguese nef carrying malmsey*	Madeira	Flanders	11.0	October 12 1472
Nef named San Cristofano	Oporto	Porto Pisano	9.0	June 29 1470
Small vessel (<i>navilio</i>) of Pessaro	Pessaro	Constantinople	10.0	May 13 1472
French galleys	Porto Pisano	Aigues Mortes	2.0	February 20 1472
Ferrandine galleys	Porto Pisano	Constantinople	5.0	July 3 1472
Burgundian galleys	Porto Pisano	Constantinople	6.0	August 21 1471

TABLE 1 (Continued)

Kind of Vessel	From	To	Rate in Per Cent	Date of Entry in Cambi's Ledger
Florentine galleys	Porto Pisano	Naples	1.0	November 6 1472
Genoese galleys	Porto Pisano	Chios	5.0	January 11 1471
Venetian galleys	Sandwich	Venice	3.0	December 31 1454
Fishing boat	Seville	Sluys	9.0	June 1 1470
Genoese or Spanish nef	Sluys	Sanlucar	6.0	April 15 1454
Genoese carrack	Sluys	Cadiz	9.5	July 8 1454
Portuguese nef	Sluys	Lisbon	8.0	September 28 1454
Catalan galleys	Sluys	Barcelona	5.0	August 8 1442
Venetian galleys	Sluys	Palermo	4.0	May 2 1473
Venetian galleys	Sluys	Palermo	4.5	October 23 1475
Burgundian galleys	Sluys	Porto Pisano	5.0	May 4 1470
Four English and/or Flemish nef	Sluys	La Rochelle	10.0	October 30 1454
Flemish nef	Sluys	La Rochelle	10.0	January 14 1455
Venetian galleys	Southampton	Majorca	4.0	September 22 1470
Genoese nef	Southampton	Porto Pisano	10.0	April 15 1454
Genoese nef	Southampton	Porto Pisano	9.0	June 1 1470
The Burgundian galley†	Southampton	Porto Pisano	6.0	July 10 1473
Genoese nef	Southampton	Porto Pisano	7.0	June 18 1473
Spanish nef	Tortosa	Porto Pisano	7.0	May 9 1472
Venetian galleys	Valencia	Porto Pisano	2.0	September 1 1472
Catalan nef	Venice	Sluys	11.0	December 31 1454
English nef	Zeeland	London	4.0	October 18 1454
Flemish nef	Zeeland	London	4.0	September 1 1454
Genoese nef	Zeeland	Barbery coast	8.0	January 16 1454
Burgundian galleys	Zeeland	Porto Pisano	4.0	April 26 1473
Biscayan caravel	Zeeland	Valencia	11.0	June 1 1470

* The entry in the Cambi ledger relating to this item reads as follows: "1472, Sichurtà deon avere. . . . E di 12 d'ottobre fl. 5 s.10 auto dal banco per sichurtà di fl. 50 sulla nave portoghallese che porta le malvage in Fiandra, c. 50. . . . fl. 5 s.10."

† The second Burgundian galley had been captured by a Danzig privateer while crossing from Zealand to England.

tional cargo for Italy. As the confidence in the Burgundian galleys was badly shaken, the insurance rate for goods carried by the uncaptured galley from Southampton to Porto Pisano jumped from 4 to 6 per cent.⁷¹ Incidentally, the Cambi ledger also records the payment of the insurance on the captured galley. No further references are found to the second galley, which was shipwrecked the following year (1474).

Bernardo Cambi, as his account books clearly show, was not specialized as an underwriter. He combined this activity with foreign banking and investments in mercantile ventures. Even after his return to Florence in 1450, most of the underwriting was done by his representatives in Bruges.⁷² In the 1470's his insurance business in Florence apparently became more important. Collected premiums were credited to an account "Insurance" (*Sicurtà*). Indemnities paid out were charged to the same account. Its balance was transferred from time to time to "Profit and Loss." The Venetian merchant Giacomo Badoer followed the same system for keeping a record of his transactions as an underwriter. Expenses for the recovery of pillaged goods incurred by the insurer, after payment of the insured's claim, were also charged to the debit of the Insurance Account.⁷³ The proceeds from the sale of goods salvaged were probably placed to the credit of the same account. This would be the logical procedure, although no actual example was found in extant records.

Despite the high premiums that were charged by underwriters, the insurance business was not always profitable. According to the accounts of Cambi, he paid out more in claims than he received in premiums. Perhaps he had bad luck. At any rate there is no ground for the opinion that premiums in the Middle Ages were excessively high, considering the risk. The insurance business was probably very competitive and the brokers strove to secure for their clients the cheapest rate possible.

Although insurance rates were not excessive, they seemed high to the insured. From his point of view, they represented an appreciable addition to cost and might wipe out his entire profit if selling prices were low. Merchants, therefore, were greatly tempted to take a chance rather than to cover their shipments by insurance.⁷⁴ Some Venetian merchants deemed it unnec-

⁷¹ Cambi Ledger, 1470-90, fol. 66^r: "E di 10 di luglio fl. 6 da' Medici per sichurtà di fl. 100 larghi sulla ghalea di Borghongna d'Antona a Pisa, portò Francesco Tedaldi, c. 67 . . . fl. 6." Note that the entry uses the singular: "la ghalea."

⁷² Cambi Ledger, 1435-59.

⁷³ Alfieri, *La Partita doppia*, pp. 96 f.

⁷⁴ Lane, *Andrea Barbarigo*, p. 116.

essary to take out insurance on goods carried by the state galleys. They were considered so safe that the only precaution that the merchants took was to limit the sum which they would “adventure” in one galley. Shipments were divided as much as possible among all the galleys that made up a fleet. This policy of reducing expenses by cutting down on insurance was not followed by all merchants. Francesco Datini, for example, gave instructions to his agents abroad that they should not ship anything overseas that was not properly insured.⁷⁶ According to the terms of a partnership agreement concluded in 1455, the branch manager and junior partner of the Medici bank in Bruges was bound by contract to insure all shipments overseas for their full value. However, when sending goods with the Venetian or Florentine galleys, he was permitted to adventure in one bottom £60 groat but not more.⁷⁶

In connection with marine insurance, there are several references in medieval records to overland insurance. One such contract of 1405 provides for the coverage of all risks both by sea and by land from the time that the bale is loaded in Florence “on mules or other beasts of burden” up to the time that it is safely unloaded from a galley or galliot in the port of Genoa. In addition to the acts of God, the perils of the sea, and the danger from men of war and pirates, the policy mentions also certain specific risks of overland transportation—robbery, and damage by rain, river, or lake water. Defective packing, customs, and tolls (*passagi*) are excepted from the risk covered by the insurance.⁷⁷ Another reference to land insurance occurs in the text of a Genoese partnership agreement dated August 16, 1424.⁷⁸ This agreement empowered one of the partners to underwrite all kinds of insurance “as well by sea as by land” (*tam in mari quam in terra*). The earlier of the two Cambi ledgers contains several references to overland insurance. In 1453, Bernardo Cambi insured several loads of merchandise sent from Bologna to Geneva in charge of Primo and his brother Jacopo, common carriers (*vetturali*). The premium was 3 per cent each time. In January 1454, Cambi’s agents in Bruges received a premium of 2.5 per cent for insuring

⁷⁶ Bensa, *Francesco di Marco da Prato*, pp. 183 f. In 1401, a Venetian merchant wrote to Datini with reference to the galleys: “. . . e niuno pensiero faremo di farvici assicurare” (“and we have no thought of insuring ourselves”).—*Ibid.*, p. 184, n. 1.

⁷⁷ Armand Grunzweig, *Correspondance de la filiale de Bruges des Medici*, Part I (Brussels, 1931), pp. 60 f.

⁷⁸ This contract is published by Livio Piattoli, “L’Assicurazione contro i danni dei trasporti terrestri nel medio evo,” *Rivista del diritto commerciale*, XXXII, Part 1 (1934), 422–38.

⁷⁹ Bensa, *Il Contratto*, p. 221, Doc. No. XV.

merchandise that was sent overland from Lille, in French Flanders, to Geneva.⁷⁹

Cambi himself even insured goods that he bought on commission. For example, he insured a shipment of four pieces of velvet from Florence to Geneva which he had purchased on behalf of Francesco Fanucci of Paris. The goods were consigned to Jacopo di Pozzi and Company in Geneva to be sold at the Easter Fair there. Cambi charged 1 per cent for commission and 3 per cent for insurance from Florence to Geneva, so that he earned 4 per cent on the transaction, as the goods reached Geneva safely.⁸⁰

Life insurance was not entirely unknown in the Middle Ages, but it was still in its infancy and was not clearly distinguished from pure gambling.⁸¹ Entries in Bernardo Cambi's account books refer to "insurance" on the life of the pope (Nicholas V), of the doge of Venice (Francesco Foscari), and of the king of Aragon (Alfonso V).⁸² Cambi gambled not only on the life of popes and kings, but also made bets on the winning horses of the Florentine *Palio*, and on the duration of a conclave and the election of a new pope (1455).⁸³ In Antwerp during the sixteenth century, wagers became a source of scandal and fraud.⁸⁴ As late as the seventeenth century, gambling on the death of rulers, the election of a pope, and the sex of expected children was common among merchants. The subject is even discussed by Malynes who devotes a chapter of his *Lex mercatoria* to merchants' wagers.⁸⁵

The confusion between genuine insurance and wagers had an adverse effect on the development of marine insurance, which came to be considered as a game of chance. Insurance was taken out by people who had no interest in a given bottom and became a wagering device through the insertion of a

⁷⁹ Cambi Ledger, 1437-59, fol. 56^r: "E di 16 di gennaio [1454] fl. cinque per valuta di £1 di grossi che i nostri di Brugia me metterono in chonto, per sichurtà di £40 di grossi fatta per me a Bonora Oliviera da Lilla a Ginevra per terra a 2½ per cento, c. 107 . . . fl. 5."

⁸⁰ *Ibid.*, fols. 56^r, 112^v-113^r.

⁸¹ Since there were no mortality tables, there was no way of computing probabilities. In Genoa masters sometimes insured pregnant slaves; and husbands insured pregnant wives. Bensa, *Il Contratto*, pp. 228, 237, Docs. XIX, XXV, dated 1427 and 1467. Insurance of pregnant slaves was also common in Barcelona. Premiums were often paid by the person responsible for the pregnancy. Robert Sydney Smith, "Life Insurance in Fifteenth-Century Barcelona," *The Journal of Economic History*, I (1941), 57-59.

⁸² The wager was usually that the ruler would die within six months. Cambi received premiums varying from 3 to 8 per cent.

⁸³ Pope Nicholas V died on March 24, 1455. The new pope, Calixtus III, was elected on April 8. The entry in Cambi's account book is dated April 1. The bet was that the pope would be elected the same day. As he was not, Cambi kept the 6 per cent premium.

⁸⁴ J. A. Goris, *Etude sur les colonies marchandes méridionales à Anvers* (Louvain, 1925), pp. 385-92, 425-28. Cf. Richard Ehrenberg, *Das Zeitalter der Fugger* (Jena, 1922), II, 19-21.

⁸⁵ Malynes, *Lex mercatoria*, Part I, chap. xxxvii, pp. 197-99.

P.P.I. (policy proof of interest) clause.⁸⁶ This abuse led to the enactment of statutes for the purpose of curbing wagers first in Italy and later in the Low Countries.⁸⁷

Another evil was that insurance was sometimes underwritten by persons who were not regular underwriters and who were not able to pay large indemnities, if they were called upon to carry out a contract. The case of Guiglielmo Barberi, an Italian merchant resident in Bruges, is a good illustration. Because of lack of ability or for other reasons, he was not very successful in business and had difficulties in meeting his obligations. In an effort to allay his troubles, he made the unfortunate decision to underwrite insurance in the hope of making an easy profit. Alas, things did not turn out as well as Barberi expected. He had insured a bale of cloth and a barrel of furs aboard a Catalan vessel bound for Barcelona. Before the ship reached its destination, it was attacked and plundered by pirates. In despair Barberi wrote to his correspondents in Catalonia begging them to search for the missing goods in all the ports and inlets along the coast from Barcelona to Valencia. He could ill afford to sustain any loss and he hoped that God would permit him to recoup this loss in some other way, "for even though I were to live a thousand years," he wrote, "never again would I underwrite insurance."⁸⁸

Even the merchants who underwrote insurance regularly were sometimes irked by losses, although they must have realized that they could not go on collecting premiums without ever paying indemnities. Francesco Datini, in a letter to his agents in Majorca, stated that he had underwritten more than a thousand policies and never lost as long as he did not stake more than fl. 150 at one time. "Now," he complained, "I am confronted with a loss of fl. 300 on one ship. I do not want any more of these dealings, because I have no luck. Sometime ago I earned fl. 100 in many small bits, then I lost fl. 200 in one stroke . . . and for several years I did no more of it [under-

⁸⁶ In medieval policies, this clause was called *habeat vel non* and meant that insurers promised to pay in case of accident whether the insured suffered a loss or not. Bensa, *Il Contratto*, p. 66.

⁸⁷ In Genoa, wagers were forbidden by statute in 1467, 1475, and 1494.—*Ibid.*, pp. 125–27. The Barcelona statutes, as early as the fifteenth century, forbade insurance on the life of princes or of the pope. In the Low Countries, an ordinance of January 20, 1571, was issued against life insurance. Wagers had already been forbidden in 1544.

⁸⁸ Archivio Datini, No. 853, Fondaco di Barcellona, Carteggio da Bruggia. Letter dated March 13, 1400: "Sono bene avisato delle bargie presse e qui anche n'è la novella, e pare abiano portato via la roba da ungni uomo . . . car se io vivessi mille anni, mai più farò sichurtà a persona." The premium was 12 per cent for the voyage from Bruges to Barcelona.

writing] ; then I started all over again.”⁸⁰ There is doubtless exaggeration in this statement. It is an outburst of ill humor upon receipt of bad news. Nevertheless, one wonders how well merchants such as Francesco Datini understood that marine insurance was a device for the sharing and the even distribution of sea risks among merchants.

By the fifteenth century marine insurance was established on a secure basis. The wording of the policies had already become stereotyped and changed very little during the next three or four hundred years, as can easily be ascertained by comparing the Florentine policy of 1397 with the forms published by Malynes in his *Lex mercatoria* or by Postlethwayt in his *Universal Dictionary of Commerce*.⁸⁰ In the sixteenth century, it was already current practice to use printed forms provided with a few blank spaces for the name of the ship, the name of the master, the amount of the insurance, the premium, and a few other items that were apt to change from one contract to another.⁸¹ But the terms of the instrument varied only in exceptional cases when the parties to the contract decided to introduce modifying clauses or additional provisions.

V

A significant development in the matter of marine insurance was the elaboration through court decisions of a body of law that tended to be the same in all countries. The fact that the Italians dominated international trade was certainly a powerful force in bringing about a considerable degree of uniformity in the legal interpretation of the standard provisions of the insurance contract. Some Bruges court decisions illustrate this process very

⁸⁰ Livio Piattoli, “Le leggi fiorentine sull’assicurazione nel medioevo,” *Archivio storico italiano*, Series 7, Vol. XVIII (1932), p. 207, n. 1: “I’ òe fatte bene mille sichurtà; e dove tochai da fior. 150 giugnendo salvo in gharigha ed altri, e ora sulla nave Panzana òe perduti fior. 300 chon Domenicho di Chanbio. Non voglio piue di queste derate, chè non ò ventura. Altra volta ne feci guadagnare fior. 100 in mille volte, poi ne perdei a un trato [fior.] 200 cho Nicholò da Uzano e chon Benichasa Alamanni, e stete parecchi anni none feci piue, poi pure me si rimesi.”

⁸⁰ Malynes, *Lex mercatoria*, Part I, chap. xxv, pp. 150–51; Malachy Postlethwayt, “Assurance,” *The Universal Dictionary of Trade and Commerce* (2d ed.; London, 1757), I, 135–36. The text of the Florentine insurance policy will be found in Bensa, *Il Contratto*, pp. 217–20, and in my *Glossary*, pp. 34–35. Cf. note 51. Goldschmidt (*Universalgeschichte*, p. 375, n. 122) gives a long list of published insurance policies. One may also compare the Florentine policy with the Spanish policy published by Goris, *Etude sur les colonies marchandes*, pp. 633–35.

⁸¹ The Antwerp Municipal Archives have a collection of hundreds of printed insurance policies of the sixteenth and seventeenth centuries.—*Catalogue de l’Exposition de l’histoire économique d’Anvers* (Antwerp, 1930), pp. 7 f.

well.⁹² Whenever an insurance case came up, the judges asked for the opinion of prominent Italian merchants concerning the prevailing mercantile custom. The judges in their decisions were likely to give much weight to this opinion. Thus the Bruges court accepted the principle that the insurer who had paid became the rightful owner of any salvaged goods;⁹³ that the insurer was not answerable if a ship sank in port before sailing,⁹⁴ or if a ship was already lost at the time of the contract;⁹⁵ that, in case of default of tidings, the indemnity was not due as long as the insured did not renounce title to the insured goods in favor of the insurer.⁹⁶ The court also decided that the insurer was not liable if there were reasons to believe that the insured had received secret intelligence of the shipwreck before taking out the insurance.⁹⁷ In still another case, the court ruled against a plaintiff who had insured goods for more than they were worth.⁹⁸

A similar process of establishing a series of precedents went on in other seaports. In some of them the rules were codified at an early date and incorporated in a statute.⁹⁹ One of the most comprehensive codifications was that of the customs of Barcelona in 1484.¹⁰⁰ They were printed together with the *Consolato del Mare* and exerted great influence. The Barcelona Code became a model for similar laws in other countries. In England, marine insurance did not gain a firm foothold until the reign of Elizabeth. Even at the end of the seventeenth century little progress had been made toward the

⁹²Trennery (*Origin and Early History of Insurance*, pp. 264 ff.), discusses the Bruges court decisions at considerable length but he assumes that Flanders played a greater role in the development of marine insurance than the country really did. He fails to notice that the insurers were Italians in almost every case. There were only one or two exceptions.

⁹³L. Gilliodts-van Severen, *Cartulaire de l'Estaple* (Bruges, 1904), II, 181-82, No. 1123, May 19, 1469, Jeronème Vento *vs.* Jean Baptiste de Laignello.

⁹⁴*Ibid.*, pp. 74-75, No. 993, January 24, 1458 (n.s.), Pierre Noël *vs.* Pierre de Rabata. The defendant was the partner of Bernardo Cambi who, as has been pointed out, underwrote many an insurance policy.

⁹⁵*Ibid.*, pp. 62-63, No. 982, March 7, 1457 (n.s.).

⁹⁶Gilliodts-van Severen, *Cartulaire*, II, 90-91, No. 1013, April 14, 1459, Marco Gentile *vs.* Pol and Francesco Justiniani; *ibid.*, pp. 92-94, Marco Gentile *vs.* Michel Arnolfini, Charles Lommelin, and Angelo Tany.

⁹⁷*Ibid.*, p. 43, No. 967, August 4, 1456, Zegherin Saren *vs.* Gregoire Lommelin.

⁹⁸*Ibid.*, pp. 203-4, No. 1154, July 18, 1470, Jeronème Vento *vs.* Pierre de Perandre and Rolland van der Vlamincpoorte. The latter, judging by the name, was evidently a Fleming.

⁹⁹On Genoese legislation, see Bensa, *Il Contratto*, pp. 82-90. On Venetian statutes, see Adolphi Sacerdoti, "L'Assicurazione a Venezia," *Atti del R. Istituto veneto*, LVI (1897-98), 1082-98. On Florentine laws, there are the studies by Guido Bonolis, "Contributo alla storia delle assicurazioni," *Archivio storico italiano*, Series 5, Vol. XXII (1898), pp. 312-21, and by Piattoli, "Le Leggi fiorentine," *op. cit.*, pp. 205-57.

¹⁰⁰Bensa, *Il Contratto*, pp. 91-109.

establishment of ascertained rules of English law.¹⁰¹ It was not until the eighteenth century "that Lord Mansfield evolved from mercantile custom and foreign precedents the principles of our modern law."¹⁰²

The statutory stage in the development of marine insurance is beyond the scope of this study. Marine insurance was a mature institution before its organization and regulation by law. Like double-entry bookkeeping and the bill of exchange, marine insurance was the creation of an age that saw the rise of the sedentary merchant and the decline of the traveling trader. Marine insurance was the outcome of the merchant's quest for security; in a similar way more modern forms of insurance, such as life insurance, fire insurance, accident insurance, and workmen's compensation, were developed in response to the needs of an industrial and individualistic age.

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¹⁰¹ Violet Barbour, "Marine Risks and Insurance in the Seventeenth Century," *Journal of Economic and Business History*, I (1929), 572, 595 f.

¹⁰² Holdsworth, *History of English Law*, VIII, 293.