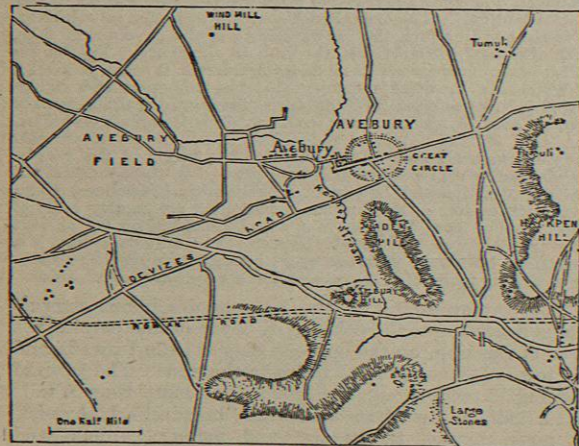


old and ruinous, others modern. On the river face it has a brick wall about 10 feet in height, with parapet and embrasures like that of Ava, and extending for above half a mile along the river. Amarapura is a large place, and was formerly the capital; but Ava, which was twice before the capital, was again made so in 1822. It continued to be so till 1853, when the present king, on his accession, transferred the capital to Mandalay. To each of the towns of Ava, Sagaing, and Amarapura, are attached districts, the two former of which extend 12 miles along the river, and are of equal breadth. The district of Amarapura is of equal size, so that Ava must be considered as not only the name of the former capital, but of a large district, which includes an area of 288 miles, containing, according to the most accurate estimate, 354,200 inhabitants; but the city of Ava is not supposed to contain more than 50,000 inhabitants, and, according to Mr Crawford, half that number would be nearer the truth. The place, taken altogether, affords few indications of industry or commercial enterprise.

AVALLON, a town of France, in the department of Yonne, finely situated on a granite rock, at the foot of which flows the river Voisin or Cousin. The church of St Lazare, which dates from the 12th century, is a good specimen of Burgundian Gothic. Manufactures of cloth, hats, hosiery, leather, and paper are carried on, and there is a considerable traffic in firewood, which is conveyed by the Voisin, the Yonne, and the Seine to Paris. The town was long an object of dispute between Burgundy and France, but was finally united to the crown on the death of Charles the Bold. It was pillaged by the Leaguers in 1594. Population, 6070. Long. $3^{\circ} 56' E$, lat. $47^{\circ} 30' N$.

AVATCHA, one of the numerous volcanoes of Kamshatka, in lat. $53^{\circ} 17' N$, and long. $158^{\circ} 50' E$. It rises to a height of nearly 9000 feet (Mr Kennan says 11,000), and has an extensive crater at the summit and another on its side. It was in active eruption in 1827, 1837, and 1855. About twenty miles to the south lies the village of Avatcha on a river of the same name; and in the immediate neighbourhood of the mountain is situated the little town of Petropavlovski, which contains memorials of Behring and La Perouse, and was the scene of a desperate conflict during the Crimean War between the Russians and an invading party of the allies.

AVEBURY, a village of England, in the county of Wilts, 6 miles W. of Marlborough. It occupies the site of



Plan of Avebury.

one of the most remarkable megalithic structures in England. This consisted of a large outer circle formed of

100 stones of from 15 to 17 feet in height, and about 40 feet in circumference, enclosing an area of about 1000 feet in diameter. This circle was surrounded by a broad ditch and lofty rampart. Within its area were two smaller circles, 350 and 325 feet in diameter respectively, each consisting of a double concentric row of stones,—a stone pillar or maenhir, 20 feet high, occupying the centre of the one, and a cromlech or dolmen that of the other. A long avenue of approach, now known as the Kennet Avenue, consisting of a double row of stones, branched off from this structure towards the S.E. for a distance of 1430 yards. Few traces of this immense erection now remain—the stones having been broken down and used in the construction of the houses of the village, and for other purposes. In the vicinity are two other monuments of great importance, which may be regarded as belonging to the same group, namely, the double oval of megaliths on Hakpen Hill—Haca's pen—and the artificial mound known as Silbury Hill. The Hakpen oval was, according to Stukeley, 138 feet by 155, and had an avenue 45 feet wide stretching in the direction of Silbury Hill. This hill is due south from Avebury, and the distance from the centre of the circle to the centre of the mound is very nearly one Roman mile. Much discussion has taken place about the age and object of these constructions, the most popular theory hitherto being that which ascribed them to the Druids, and thus got rid of historic difficulties by escaping into the region of the prehistoric. Recently, Mr Fergusson has strenuously maintained that the larger circle, or Avebury proper, and Silbury Hill, commemorate the last of the twelve Arthurian battles, which was fought (520 A.D.) at Badon Hill, a name which he identifies with Waden Hill.

AVEIRO, a town of Portugal, province of Beira, the seat of a bishopric and college. It has sardine, oyster, and herring fisheries, as well as a thriving trade in oil, salt, wine, and oranges. The haven is wide and deep. Population, 6456. Long. $8^{\circ} 34' W$, lat. $40^{\circ} 40' N$.

AVELLA, a town of Italy, in the province of Principato Ulteriore, in a fine situation, and commanding most extensive prospects. It is distant about 20 miles from Naples, and contains 3714 inhabitants. Near it are the remains of the ancient Abella.

AVELLINO, a fortified city of Italy, in the province of Principato Ulteriore, at the foot of Mount Vergine, and 28 miles E. of Naples. It is the see of a bishop, and has a cathedral, several parish churches, a royal college, &c., with manufactories of cloth, paper, macaroni, and sausages, and extensive dye-works. It has a considerable trade in corn, chestnuts, and hazel-nuts. The city has at various times suffered severely from earthquakes. Population, 20,492.

AVEMPACE. ABU BEKR MOHAMMED IBN JAHYA, surnamed Ibn Badja or Ibn Sayeg (i.e., son of the goldsmith), whose name has been corrupted by the Latins into Avempace, Avenpace, or Aben Pace, was the earliest and one of the most distinguished of the Arab philosophers in Spain. Almost nothing is known of the events in his life; he was born, probably at Saragossa, towards the close of the 11th century, and died at Fez in 1138 at a not very advanced age. Like most of the Arab philosophers, he was a physician by profession, and he is also said to have been a man of wide general culture. He was a skilled musician, mathematician, astronomer, and poet, and though he is now known only through his metaphysical speculations, these do not seem to have been his favourite studies. His writings, if we accept the report of Oeclbia, were varied and numerous. Several treatises on logical subjects are mentioned by Casiri as still among the MSS. at the Escorial, and some smaller pieces are also found in other

libraries. The most important of his works is that noticed by Averroes, who promised a complete discussion of it, but unfortunately neither the treatise nor the exposition has come down to us. Our knowledge of it is almost entirely drawn from the notices given by Moses of Narbonne, a Jewish writer of the 14th century, in his commentary on the somewhat similar work of Ibn Tofail. The title of the work may be translated as the *Régime* or *Conduct of the Solitary*, understanding by that the organised system of rules, by obedience to which the individual may rise from the mere life of the senses to the perception of pure intelligible principles, and may participate in the divine thought which sustains the world. These rules for the individual are but the image or reflex of the political organisation of the perfect or ideal state; and the man who strives to lead this life is called the *solitary*, not because he withdraws from society, but because, while in it, he remains a stranger to its ways, and guides himself by reference to a higher state, an ideal society. Avempace does not develop at any length this curious Platonic idea of the perfect state. His object is to discover the highest end of human life, and with this view he classifies the various activities of the human soul, rejects such as are material or animal, and then analyses the various spiritual forms to which the activities may be directed. He points out the graduated scale of such forms, through which the soul may rise, and shows that none are final or complete in themselves, except the pure intelligible forms, the ideas of ideas. These the intellect can grasp, and in so doing it becomes what he calls *intellectus acquisitus*, and is in a measure divine. This self-consciousness of pure reason is the highest object of human activity, and is to be attained by the speculative method. The intellect has in itself power to know ultimate truth and intelligence, and does not require a mystical illumination as Algazali taught. Avempace's principles, it is clear, lead directly to the Averroistic doctrine of the unity of intellect, but the obscurity and incompleteness of the *Régime* do not permit us to judge how far he anticipated the later thinker. (See Munk, *Mélanges de Phil. Juive et Arabe*, pp. 383-410.)

AVENBRÜGGER, or AVENBRUGGER, LEOPOLD, a physician of Vienna, the discoverer of the important mode of investigating diseases of the chest and abdomen by *auscultation*. His method was to apply the ear to the chest, and to note the sounds it afforded on percussion by the hand, or what is called *immediate auscultation*. His Latin treatise, *Inventum novum ex Percussione Thoracis Humani Interni Pectoris Morbos detegendi*, published in 1761, excited little attention, until it was translated and illustrated by Corvisart, in 1808, when it soon led the way to Laennec's great improvement of aiding the ear by the stethoscope, or *mediate auscultation*. The great value of the method introduced by Avenbrugger, in the diagnosis of internal diseases, is now universally acknowledged. He was born at Grätz in 1722, and died in 1809.

AVENTINUS [JOHANN THURMAYR], author of the *Annals of Bavaria*, was born in the year 1466 at Abensberg. He studied first at Ingoldstadt, and afterwards in the university of Paris. In 1503 he privately taught rhetoric and poetry at Vienna, and in 1507 he publicly taught Greek at Cracow, in Poland. In 1509 he read lectures on some of Cicero's works at Ingoldstadt, and in 1512 was appointed preceptor to Prince Ludwig and Prince Ernst, sons of Albert the Wise, duke of Bavaria, and travelled with the latter of these princes. After spending several years in the collection of materials he undertook to write the *Annales Boiorum*, or *Annals of Bavaria*, being encouraged by the dukes of that territory, who settled a pension upon him, and gave him hopes that they would defray the expenses of publication. He finished, but did

not publish, his work in 1528, and in the following year he was imprisoned on suspicion of heresy. He was soon released from confinement, but the indignity he had suffered seriously affected him. He died in 1534 at Ratisbon. His history, which has gained for him considerable reputation as a writer, was published, but with some important omissions, in 1554, by Ziegler, professor of poetry in the university of Ingoldstadt. These passages, which were adverse to the Roman Catholics, were all restored in the edition published at Basle in 1580, by Nicholas Cisner. Besides his other writings, Gesner attributes to him a curious work, entitled *Numerandi per digitos manusque Veterum Consuetudines*.

AVENZOAR [ABU MERWAN ABDALMALEC IBN ZOHR], an eminent Arabian physician, who flourished about the end of the 11th or beginning of the 12th century, was born at Seville, where he exercised his profession with great reputation. His ancestors had been celebrated as physicians for several generations, and his son was afterwards held by the Arabians to be even more eminent in his profession than Avenzoar himself. He was contemporary with Averroes, who, according to Leo Africanus, heard his lectures and learned physic of him. This seems probable, because Averroes more than once gives Avenzoar very high and partly deserved praise, calling him admirable, glorious, the treasure of all knowledge, and the most supreme in physic from the time of Galen to his own. Avenzoar, notwithstanding, is by the generality of writers reckoned an empiric; but Dr Freind observes that this character suits him less than any other of the Arabian physicians. Avenzoar belonged, in many respects, to the *Dogmatists* or *Rational School*, rather than to the *Empirics*. He was a great admirer of Galen; and in his writings he protests emphatically against quackery and the superstitious remedies of the astrologers. He shows no inconsiderable knowledge of anatomy in his remarkable description of inflammation and abscess of the mediastinum in his own person, and its diagnosis from common pleuritis as well as from abscess and dropsy of the pericardium. In cases of obstruction or of palsy of the gullet, his three modes of treatment are ingenious. He proposes to support the strength by placing the patient in a tepid bath of nutritious liquids, that might enter by cutaneous imbibition, but does not recommend this. He speaks more favourably of the introduction of food into the stomach by a silver tube; and he strongly recommends the use of nutritive enemata. From his writings it would appear that the offices of physician, surgeon, and apothecary were already considered as distinct professions. He wrote a book entitled *The Method of Preparing Medicines and Diet*, which was translated into Hebrew in the year 1280, and thence into Latin by Paravicinus, whose version, first printed at Venice 1490, has passed through several editions.

AVERAGE, a term used in maritime commerce to signify damages or expenses resulting from the accidents of navigation. Average is either *general* or *particular*. General average arises when sacrifices have been made, or expenditures incurred, for the preservation of the ship, cargo, and freight, from some peril of the sea, or from its effects. It implies a subsequent contribution, from all the parties concerned, rateably to the values of their respective interests, to make good the loss thus occasioned. Particular average signifies the damage or partial loss happening to the ship, goods, or freight by some fortuitous or unavoidable accident. It is borne by the parties to whose property the misfortune happens, or by their insurers. The term average originally meant what is now distinguished as general average; and the expression "particular average," although not strictly accurate, came to be afterwards used for the convenience of distinguishing those damages or partial

losses for which no general contribution could be claimed.

Although nothing can be more simple than the fundamental principle of general average, that a loss incurred for the advantage of all the coadventurers should be made good by them all in equitable proportion to their stakes in the adventure, the application of this principle to the varied and complicated cases which occur in the course of maritime commerce has given rise to many diversities of usage at different periods and in different countries. It is soon discovered that the principle cannot be applied in any settled or consistent manner unless by the aid of rules of a technical and sometimes of a seemingly arbitrary character. The distinctions on which these rules turn are often very refined indeed. This is the chief reason why no real progress has yet been made towards an international system of general average, notwithstanding repeated conferences and other efforts by most competent representatives from different countries, seeking to arrive at a common understanding as a preliminary basis for such a system. A brief summary only can be given here of the rules which have been established in Great Britain by usage, or by legal decisions, in connection with the subject.

All general average losses may be divided into two principal classes—(1), *sacrifices* of part of the cargo and freight, or of part of the ship, for the general safety; (2), *extraordinary expenditures* incurred with the same object. We shall notice these in their order.

When a part of a *cargo* is thrown overboard (or *jettisoned*, as it is termed) to save the ship from foundering in a storm, or to float her when stranded, or to facilitate her escape from an enemy, the loss of the goods and of the freight attached to them must be made good by average contribution. But if goods jettisoned have been originally stowed on deck, no contribution can be demanded for them, unless they are so carried according to the common usage and course of trade on the voyage for which they are shipped, or with the consent of all the parties concerned in the ship and cargo.

If, instead of being thrown overboard, the goods are put into boats or lighters, and lost or damaged before reaching the shore, such loss is regarded as a virtual jettison, and gives a claim to average contribution. The same rule applies to damage occasioned by the goods being put ashore on muddy ground, or where they cannot be kept in ordinary safety. But when the goods have been conveyed to a place of ordinary safety, they cease to be at the risk of the general interest; and should they be damaged there by fire or other accidents the loss must be borne by the individual proprietors, or by their insurers.

Damage done to the cargo by discharging it at a port of refuge in the manner and under the circumstances customary at that port, is not allowed as general average. This rule covers the case of wastage, breakage, leakage, &c., from handling the goods in the ordinary course of discharging, warehousing, and reshipping.

If goods are thrown overboard from having become, through heating or other cause peculiar to their own condition, a source of special danger to the whole interest, the loss is not recoverable in general average. So, too, if a cargo is discharged at a port of refuge from damage resulting from its own *vice propre*, the costs are chargeable to its owners.

The loss of corn, salt, guano, or similar goods, arising from their being pumped up or baled out with the water in the vessel, is not recoverable by average contribution. The damage done to the cargo by means of water thrown down the hatches, or admitted into the ship by scuttling her, for the purpose of extinguishing an accidental fire, was excluded from general average by the usage of Lloyds up till 1873. In that year the courts of Queen's Bench and Exchequer Chamber expressed a strong opinion

in connection with the case of *Stewart v. the West India and Pacific Steamship Company*, that such damage ought to be made good by average contribution. The usage has now been altered accordingly.

The amount of compensation to be made for goods sacrificed by general average acts is determined by the net market price they would have produced on arrival at the port of destination had they not been sacrificed; but under deduction of the freight attaching to them (which is made good to the shipowners), and of the charges for duties and landing expenses which are saved.

The general average acts next to be considered are those which involve sacrifices of part of the *ship or her materials*.

The same principles which regulate the case of goods thrown overboard apply also to the jettison of the ship's chains, anchors, hawsers, spars, boats, or other stores. But if water casks are stowed on deck, or if chains and hawsers are carried on deck when the vessel is not near the land so as to render it necessary that they should be so carried, the loss arising from the jettison of these articles falls on the shipowner; and if boats are jettisoned in consequence of their having been broken adrift from their fastenings on deck by the force of the sea, they are excluded from general average, and are charged to particular average on the ship. The damage done to the ship by cutting holes to effect a jettison of the cargo, or to pour down water to a fire, or by scuttling her for that purpose, is allowed as a general average charge. The damage arising from cutting or knocking away a portion of the ship's bulwarks in order to prevent the deck from being flooded in a storm, is compensated in the same manner.

When sails or masts are cut away in order to right a ship which has been thrown on her beam-ends, or to prevent her from driving on a lee-shore, the loss is made good by average contribution; but if the object in cutting away a sail or spar be merely to *save a mast*, the loss is not made good in general average.

It frequently happens that masts or yards are sprung and carried away by the force of the wind, and are left entangled in the rigging, or hanging over the ship's side in what is termed "a state of wreck;" in these circumstances it becomes necessary to cut them away, with the sails and rigging attached, and to throw the whole overboard, otherwise they would impede the navigation, and endanger the ship and cargo. On this ground it is held by some authorities that the loss caused by the act of cutting them away should be made good by average contribution. But this act is the direct consequence of the previous accident, which places these articles in a situation where it is impossible to save them without imperilling the ship, cargo, and lives. It would not be reasonable to imperil these for such a purpose; whence it follows that the displaced articles are already *virtually* lost by means of the original accident, before the loss is *actually* consummated by cutting them away. This loss is accordingly excluded, by the usage of this country, from average contribution. On the same principle, no contribution can be demanded for any articles which are sacrificed as having themselves become, through previous accident, the immediate cause of danger to the whole interest.

The loss of sails or spars, in consequence of carrying a press of canvas to avoid a lee-shore, or to escape from an enemy, is not the subject of general average in this country; neither is the damage suffered by the ship from *straining* under any such extraordinary press of sail.

When anchors and cables are slipped from in order to work a vessel off a lee-shore, or to avoid collision with another ship, the loss is made good by average contribution; but if the cable is slipped in order that the vessel may join convoy, or because the anchor has become

hooked to some object at the bottom and cannot be raised, the loss is borne by the shipowner.

When sails, ropes, or other materials are cut up and used at sea for the purpose of stopping leaks or to rig jury-masts, or when the common benefit requires that they should be applied to some purpose for which they were not originally intended, the loss is made good in general average. The same rule applies to the case of hawsers, cables, anchors, sails, or boats, lost or damaged in attempting to force off a stranded vessel from the shore.

The damage sustained in defending a ship against a pirate or an enemy is not the subject of general average in this country; it is treated as particular average on the ship.

It has been much debated by writers on maritime law, whether the voluntary stranding of a ship, in order to prevent her from foundering, should be treated as a general or as a particular average loss. In the United States it has been settled, by judicial decision, that the loss in question constitutes a general average claim; but the opposite doctrine is acted upon in the usage of Great Britain, and the point has never been decided by the courts of law. It appears to us that the argument greatly preponderates against the rule adopted in the United States, and in favour of the usage established in this country. The only reason for regarding this loss as the subject of general average is, that it originates in the intentional act of running the ship aground, for the preservation, as far as possible, of the whole interest concerned. But it can seldom be known beforehand how the different interests at stake will be specially affected by the act in question;—whether, for instance, the damage to the cargo may not be more serious than the damage to the ship, or *vice versa*. Thus no particular part of the interest can be said to be intentionally sacrificed for the benefit of the whole; the intention, indeed, is not to sacrifice any one part, but to place the whole interest in a situation of less peril than it would otherwise have been in. What particular damages may thereafter ensue to either ship or cargo will depend, in each case, on a variety of circumstances entirely accidental in their character, and therefore in no proper sense the subject of previous intention. The same rule, therefore, which excludes from general average accidental damages in all other cases, ought to exclude them in this case also. Moreover, when the alternatives are either that the vessel be left to founder, or that she be run ashore with a chance of preservation, there can really be no room for choice, or, at all events, the elements of will and intention are entirely subordinate in the part they must play under the pressure of the existing circumstances; and in this view the stranding is as truly inevitable as if it had been caused by the force of the winds and waves alone.

But, even were these reasons less weighty than it appears they are, a serious practical objection might be urged against the doctrine that voluntary stranding should be a general average loss, on the ground that it would in most cases be impossible to distinguish between the damages received by the ship and cargo prior to the stranding, and those sustained after or in consequence of it. It is needless to remark, that before a ship can be in such imminent danger of foundering as to render it necessary to run her ashore, she must be presumed to have sustained a very considerable amount of damage; and the probability is, that the cargo also will have suffered to a corresponding extent. Up to this point these damages are confessedly *particular* average; and were it held that the damages after the stranding were the subject of *general* average, it would, of course, be necessary to distinguish the separate damages that belonged to each. But in every case these different damages would exist in varying proportions, yet always so incorporated together that justice could never

have a more perplexing task than that of discriminating between them. No general rule could be applied that would meet the widely different circumstances of each particular case; and the arbitrary method of adjustment that would alone be possible would doubtless give rise to endless dissatisfaction and dispute. On the ground of expediency, therefore, as well as on that of principle, the usage now established in this country ought to be maintained, notwithstanding the high authorities by whom the opposite practice has been countenanced.

The amount of general average losses on the ship is compensated by allowing to the owners the cost of repairs, or of new materials in place of those sacrificed, subject to the deduction of one-third for the difference of value between old and new; but no deduction is made from the cost of new anchors, and only one-sixth is deducted from the cost of new chain cables. If the ship be on her first voyage (which is held to include the homeward as well as the outward passage), the repairs and new materials are allowed in full.

We now proceed to notice the second principal class of general average losses, consisting of extraordinary expenditures incurred with a view to the common benefit.

When a ship is obliged to put into a port of refuge, in consequence of damage received in the course of the voyage, the usage in this country is to allow as general average all the charges connected with the entrance of the vessel into the port, and with the landing and warehousing of the cargo, when this is necessary to admit of the ship being repaired. Thus the expenses of pilotage or other assistance into the port, the harbour dues, and similar charges, the costs of the protest taken by the master and crew, and of the survey held to ascertain whether the cargo requires to be discharged, together with the charges for landing the cargo and conveying it to a warehouse or other place of safety, are all made good as general average. The costs of repairing the ship are charged to general average only in so far as the repairs may refer to damages which are themselves the proper subject of general contribution. If the damages are of the nature of particular average, as is more usually the case, they are charged accordingly; or if they proceed from "wear and tear," they are stated against the shipowner.

The warehouse rent for the cargo at a port of refuge, and any expenses connected with its preservation, form special charges against that particular interest, and are borne by the proprietors of the goods, or by their insurers. When goods are insured "free from particular average, unless the ship be stranded," it is necessary, if the ship has not been stranded, to distinguish the charges for warehouse rent and fire insurance from those incurred in connection with the preservation of the goods from the effects of damage,—the underwriters being liable for the former, but not for the latter.

The expenses of reshipping the cargo, and the pilotage, or other charges *outwards*, are borne by the freight. If the entire cargo cannot be taken on board again, from the want, at the port of refuge, of the usual facilities for stowing it, the loss or expenses resulting from the exclusion of part of it are not treated, in this country, as the subject of general contribution.

The wages and provisions of the master and crew during the period of detention at a port of refuge are not admitted as a charge against general average, it being held that the shipowner is bound to keep a competent crew on board the ship from the commencement to the end of the voyage at his own expense.

The charges for agency at a port of refuge are brought against the general average, even though they may have been originally made in the form of separate charges

against the ship and cargo respectively. Commissions on money advanced, maritime interest on bottomry and *respondentia*, and the loss on exchanges, &c., are apportioned relatively to the gross sums expended on behalf of the several interests concerned.

The expenses incurred in getting a stranded ship off the ground, the hire of extra hands to pump a ship which has sprung a leak, and the sums awarded for salvage or for other services rendered to the ship and cargo under any extraordinary emergencies, are compensated by average contribution. But this rule applies only to the *extraneous* assistance that may have been obtained, the crew being bound to do their utmost in the service of the ship on all occasions, with extra remuneration for what they might consider extraordinary exertions on their part.

The costs of reclaiming the ship and cargo after having been captured are allowed as general average charges; and although *ransom* to an enemy is prohibited in this country by legal enactment, it seems that this does not apply to the case of money or goods given up by way of composition to pirates for the liberation of the ship and cargo, and that this would also form a subject of average contribution.

When the ship and cargo arrive at the port of destination it is unnecessary, in ordinary cases, to distinguish, in the adjustment of the general average, between the losses which have arisen from *sacrifices* and those which have resulted from *expenditures* for the common benefit. But if the ship and cargo should be lost before reaching their destination, no contribution is due for the goods or ship's materials which may have been *sacrificed* at a former stage of the voyage, the owners of these being in no worse position than any of their coadventurers. On the other hand, it is evident that when money has been *expended* for the common benefit, the subsequent loss of the ship and cargo should not affect the right of the party who has made the advance to recover it in full from all the parties for whose advantage it was originally made. Hence, while *sacrifices* are made good only in the event of the ship and cargo being ultimately saved, *expenditures* must be reimbursed whether the ship and cargo be eventually saved or lost; and the contribution for these expenditures must be regulated by the values of the ship, cargo, and freight as they stood at the time when the advances were made.

If, however, the money required for average expenditures has been raised by means of bottomry, and the ship be lost before completing the voyage, there can be no claim for reimbursement,—the risk being assumed by the bottomry lender in consideration of the premium he receives on the sum advanced. When there is no bottomry, it is a usual practice, but not an invariable rule, to insure the average disbursements by a special policy. When this has been done, and when the amount has been recovered on the subsequent loss of the ship, it cannot be again claimed from the individuals who would otherwise have been liable. But if the expenditures are not insured, either by a bottomry contract, or by a special policy, and if the ship and cargo be totally lost in the subsequent course of the voyage, the parties for whose benefit the expenditures were incurred must reimburse them on the principles already explained. These parties, however, have recourse on their original insurers, not only for the total loss of the interests insured, but also for the previous expenditures, although the insurers may thus be called on to pay a *larger sum* than the amount of the insurance.

The contribution for general average losses is regulated by the values of the respective interests for the benefit of which they were incurred. The practical rule adopted, in all ordinary cases, is to estimate the ship, cargo, and freight at their *net* values to their owners, in the state in

which they arrive at the port of destination, *but including in these values the sums made good for sacrifices*, and to assess the contribution accordingly. The necessity for including the amount of compensation made for sacrifices in the valuations on which the contribution is charged, arises from the principle that all the parties interested in the adventure should bear the ultimate loss in exact proportion to their respective interests, which would not be the case if the owners of the articles sacrificed were to recover their full value without being themselves assessed for the loss thereon in the same manner as their coadventurers.

The contributory value of the *ship* is accordingly her actual value to her owner in the state in which she arrives, whether damaged or otherwise, including the sum made good in the general average for any sacrifices which may have been made of part of the ship or her materials.

The value of the *cargo* for contribution is its net market value on arrival, after deducting the charges incurred for freight, duty, and landing expenses, but without deducting the costs of insurance or commission. If goods be damaged, they contribute only according to their deteriorated value; and if special charges have been incurred on the cargo at a port of refuge (as for warehouse rent, &c.), the amount of these charges is deducted. The sum charged to general average for goods sacrificed is of course added to the valuation. All goods carried in the ship for the purposes of traffic must be included in the valuation of the cargo; but the wearing apparel, or personal effects, of the passengers and crew are exempted from contribution.

The value of the *freight* for contribution is the sum received by the shipowner on the completion of the voyage for the carriage of the cargo, after deducting from that sum the wages reckoned as from the date of the casualty, the port charges at the place of destination, and the special charges against the freight which may have been incurred at a port of refuge, consisting of the costs of reshipping the cargo, and of outward pilotage, &c. The provisions for the voyage are not deducted, as these are held to have formed part of the original value of the *ship*. If the freight has been paid in advance, it forms part of the value of the *goods*, and, consequently, does not contribute as a separate interest. When a sum has been advanced on account of freight, subject to insurance, it must be distinguished from the portion of the freight which remains at the shipowner's risk, and be charged separately for its rateable contribution; and the freight so advanced is not subject to deduction for wages, &c., this deduction being made only from the freight at risk. It has been decided that, when a vessel has been originally chartered for a double voyage, the whole freight to be earned under the charter-party must contribute at its net value, after deducting the wages and other charges which must be incurred in earning it. The effect of this rule is to render the freight attaching to the *return* voyage, as well as that attaching to the voyage *outwards*, liable to contribute for average losses arising in the course of the outward passage,—a result the equity of which is not always very apparent.

An adjustment of general average made at any foreign port where the voyage may terminate, if proved to be in conformity with the law and usage of the country to which such foreign port belongs, is binding on all the parties interested as coadventurers, although they may be subjects of this country, and although the adjustment may be made on principles different from those sanctioned by the laws or usages of Britain. The reason for this rule is, that the parties engaging in the adventure are held to assent to the known maritime usage according to which general average is adjusted on the arrival of the ship and goods at the port of destination.

The subject of general average is only incidentally connected with that of marine insurance, being itself a distinct branch of maritime law. But the subject of particular average arises directly out of the contract of insurance, and will therefore be best considered in connection with it. (See INSURANCE.)

For further information with respect to the subject of average, the reader is referred to the famous work of M. Valin, *Commentaire sur l'Ordonnance de 1681*, t. ii. p. 147-198, ed. 1760; to Emerigon, *Traité des Assurances*, t. i. pp. 598-674; Arnould on *Marine Insurance*; and the treatises on *Average* of Stevens, Benecke, Baily, Hopkins, and Lowndes. (J. W. A.)

AVERNUS, a lake of Campania in Italy, near Baiæ, occupying the crater of an extinct volcano, and about a mile and a half in circumference. From the gloomy horror of its surroundings, and the mephitic character of its exhalations, it was regarded by ancient superstition as an entrance to the infernal regions. It was especially dedicated to Proserpine, and an oracle was maintained on the spot. In 214 B.C., Hannibal with his army visited the shrine, but not so much, according to Pliny, for purposes of piety, as in hope of surprising the garrison of Puteoli. By some critics the Cimmerians of Homer were supposed to have been the inhabitants of this locality, and Virgil in his *Aeneid* adopted the popular opinions in regard to it. Originally there seems to have been no outlet to the lake, but Agrippa opened a passage to the Lucrine, and turned this "mouth of hell" into a harbour for ships. The channel, however, appears to have become obstructed at a later period. In the reign of Nero it was proposed to construct a ship-canal from the Tiber through Avernus to the Gulf of Baiæ, but the works were hardly commenced. The plan of connecting the lake with the Gulf of Baiæ was brought forward as late as 1858, but only to be abandoned. The *Lago d'Averno* is now greatly frequented by foreign tourists, who are shown what pass for the Sibyl's Grotto, the Sibyl's Bath, and the entrance to the infernal regions, as well as the tunnel from Cumæ, and ruins variously identified as belonging to a temple or a bathing-place.

AVERROES, known among his own people as Abû-Walid Mohammed Ibn-Ahmed Ibn-Mohammed Ibn-Rosno, the kâdi, was born at Cordova in 1126, and died at Marocco in 1198. His early life was occupied in mastering the curriculum of theology, jurisprudence, mathematics, medicine, and philosophy, under the approved teachers of the time. The years of his prime were a disastrous era for Mahometan Spain, where almost every city had its own petty king, whilst the Christian princes swept the land in constant inroads. But with the advent of the Almohades, the enthusiasm which the desert tribes had awakened, whilst it revived religious life and intensified the observance of the holy law within the realm, served at the same time to reunite the forces of Andalusia, and inflicted decisive defeats on the chiefs of the Christian North. For the last time before its final extinction the Moslem caliphate in Spain displayed a splendour which seemed to rival the ancient glories of the Omniade court. Great mosques arose; schools and colleges were founded; hospitals, and other useful and beneficent constructions, proceeded from the public zeal of the sovereign; and under the patronage of two liberal rulers, Jusuf and Jakûb, science and philosophy flourished apace. It was Ibn-Tofail (Abubacer), the philosophic vizier of Jusuf, who introduced Averroes to that prince, and Avenzoar (Ibn-Zohr), the greatest of Moslem physicians, was his friend. Averroes, who was versed in the Malekite system of law, was made kâdi of Seville (1169), and in similar appointments the next twenty-five years of his life were passed. We find him at different periods in Seville, Cordova, and Marocco, probably follow-

ing the court of Jusuf Almansur, who took pleasure in engaging him in discussions on the theories of philosophy and their bearings on the faith of Islam. But science and free thought then, as now, in Islam, depended almost solely on the tastes of the wealthy and the favour of the monarch. The ignorant fanaticism of the multitude viewed speculative studies with deep dislike and distrust, and deemed any one a Zendik (infidel) who did not rest content with the natural science of the Koran. These smouldering hatreds burst into open flame about the year 1195. Whether, as one story ran, he had failed in conversation and in his writings to pay the customary deference to the emir, or a court intrigue had changed the policy of the moment, at any rate Averroes was accused of heretical opinions and pursuits, stripped of his honours, and banished to a place near Cordova, where his actions were closely watched. Tales have been told of the insults he had to suffer from a bigoted populace. At the same time efforts were made to stamp out all liberal culture in Andalusia, so far as it went beyond the little medicine, arithmetic, and astronomy required for practical life. But the storm soon passed, when the transient passion of the people had been satisfied, and Averroes for a brief period survived his restoration to honour. He died in the year before his patron Almansur, with whom (in 1199) the political power of the Moslems came to an end, as did the culture of liberal science with Averroes. The philosopher left several sons, some of whom became jurists like Averroes's grandfather. One of them has left an essay, expounding his father's theory of the intellect. The personal character of Averroes is known to us only in a general way, and as we can gather it from his writings. His clear, exhaustive, and dignified style of treatment evidences the rectitude and nobility of the man. In the histories of his own nation he has little place; the renown which spread in his lifetime to the East ceased with his death, and he left no school. Yet, from a note in a manuscript, we know that he had intelligent readers in Spain more than a century afterwards. His historic fame came from the Christian Schoolmen, whom he almost initiated into the system of Aristotle, and who, but vaguely discerning the expositors who preceded, admired in his commentaries the accumulated results of two centuries of labours.

For Aristotle the reverence of Averroes was unbounded, and to expound him was his chosen task. The uncritical receptivity of his age, the defects of the Arabic versions, the emphatic theism of his creed, and the rationalising mysticism of some Oriental thought, may have sometimes led him astray, and given prominence to the less obvious features of Aristotelianism. But in his conception of the relation between philosophy and religion, Averroes had a light which the Latins were without. The science, falsely so called, of the several theological schools, their groundless distinctions and sophistical demonstrations, he regarded as the great source of heresy and scepticism. The allegorical interpretations and metaphysics which had been imported into religion had taken men's minds away from the plain sense of the Koran, and destroyed the force of those appeals which had been spoken to the hearts and understandings of our common humanity, not to the wisdom of the "people of demonstration." God had declared a truth meet for all men, which needed no intellectual superiority to understand, in a tongue which each human soul could apprehend according to its powers and feelings. Accordingly, the expositors of religious metaphysics, Algazali included, are the enemies of true religion, because they make it a mere matter of syllogism. Averroes maintains that a return must be made to the words and teaching of the prophet; that science must not expend itself in dogmatizing on the metaphysical consequences of fragments of doctrine for