

Allegorical figure of Mercury. As a characteristic attribute he bears in his hand a purse (bourse). After Foxton's "Cosmographia", 1408. Trinity College, Cambridge.

These courts were called Pied-Powder Courts in England (corrupted from pieds poudrés), as the parties came straight from their stalls to the court, still covered with the dust of the market. More important than the supervision of weights and measures or the settlement of differences was the institution of market-freedom. For a long time it had been the custom to make all the citizens of a foreign country responsible for the misdeeds or obligations of any one of their fellow-country men.

This was soon realized to be a great danger to international trade. The fairs could only flourish if every visitor could go about his business with as little let or hindrance as possible. This fact was forcibly brought home to French traders. When in 1284 the provinces of Champagne came under French rule, and heavy duties were imposed by the state on visitors to the fairs, there was a sharp decline in trade, and in 1349 the ancient liberties had to be restored. The merchants of England had recognized this danger in time, and in Magna Charta (1215) they succeeded in securing the

guarantee by the king of market-freedom and protection for foreign merchants. Foreign visitors to the fairs were exempt from charges, whilst the native merchants received preference in the assignment of stands. There was often a striking mixture of generous promotion of trade and fiscal interest in the charges, duties, and other revenues of the fairs. The kings of England showed great interest in the markets, because they found it easier to assess incomes, taxes, etc. than when business was done in shops or counting houses. In many cases the shop-keepers of a town and its environs were compelled to close their shops for the duration of a fair, and to do business on the fair-ground. That was the case in the City of Westminster, where the king was the recipient of the revenues of St. Edward's Fair.

As institutions for the furthering of international trade, these great medieval markets were the most important forerunners of the modern exchange or bourse, though always with the difference that the goods, and not merely a sample or specification, were actually on the spot.

The letters of a Nuremberg silk merchant named Balthasar Paumgartner adressed to his wife in the years 1582–98 give a detailed account of trade at the fairs of his time. Paumgartner's firm had a branch at Lucca, and at regular intervals he would go there and to

Money Changers. Painting by Marinus van Roymerswaele (ab. 1493–1567). National Gallery, London.





The cattle-market of Smithfield, north of St. Bartholomew's Hospital, in 1811. Hides were also traded at Smithfield. After Th. Rowlandson (1756–1827).

Florence, Genoa, and Rome, in order to purchase silks, which he brought to the autumn fair at Frankfort on Main. With a wealth of pedantic detail he reported to his wife how business was progressing, of the annoyance caused to him by Italian colleagues, who did not fulfil their contracts punctually, thus putting him to the risk of being late with his transports. For it was his custom to send the goods on ahead, so that they should be there, when he arrived with his assistants to unpack them. Paumgartner was often ailing, and often on the point of retiring from business. But while he remained a merchant, he worked conscientiously, not without petulance, less enterprising than the merchant of the 13th century epic, and without the reckless plunging for large and rapid profits which was to become so prevalent a century later. He disapproved of the manner in which some early speculators strove to secure a monopoly of pepper, the first article of commerce which might be described as fungible. To the house of Tucher in Nuremberg went at about the same time the reports of Christopher Kurz from Antwerp; he pretended to be able to

predict the price-movements of pepper, ginger, and saffron 14 days ahead, basing his estimates on a complicated astrological system, quite in accordance with the spirit of his time, which attempted to reduce even those things to a formula which by their very nature make such a procedure impossible.

The world of Paumgartner is more realistic. In 1587 his wife sent him the following message to the fair: "May the Almighty grant a good profitable fair and correct payment", on another occasion she wrote: "God preserve us from customers who default when business is done." For at the close of the fair, settling day came round. This last, intricate stage of the proceedings was heralded by cries of "Ara"; then the money-changers (see ill. p. 669) began their activities. Even without the grave debasement of the coinage at that time and without the many fluctuations of prices, which accompanied the turbulent age of discovery and of gold imports, of early capitalism and trade-wars, the transaction of business at the fairs must have been exceedingly involved. For the monetary systems during the Middle Ages and far into modern

times were no fewer than the many units of weights and measures. The expert alone could tell what every coin, every taler, groschen, penny, or guilder, was really worth. At an early date already merchants sought to avoid the awkward and dangerous necessity of carrying large quantities of coin from fair to fair. It was the Italians, the earliest and most astute merchants of the Middle Ages, who introduced the bill of exchange into European trade. "The bill of exchange" cambium literale or cambium locale (cambium duobus distinctis locis sic dictum), "is the exchange of one currency for another, but only in such a manner that the one currency or sum is paid on the spot by the giver, and repaid by the recipient in some strange or foreign place, either in the same currency or in one which, though differing from it in face value and minting, is brought to the same standard of value by means of the agio." Thus the somewhat laboured definition of a 17th century German theorist of economics, Paul Jacob Marperger. These bills constitute an order to pay a fixed sum in an unspecified currency at a place other than that where they were issued. In other words, time and distance are bridged, and trade at distant places is divorced from the mere exchange of goods.

According to Marperger it was believed in his time that the Jews invented this method of transacting business, when, on their expulsion from France, they retired to Lombardy, and adopted this method of gradually withdrawing the property which they had been obliged to leave behind them. Marperger himself, however, thinks it more probable that the Ghibellines, who were driven out of Italy by the Guelph faction, and settled in Germany or the Netherlands, were the originators of bills of exchange. However that may be, the earliest banking-houses were known as Lombards, and the word exists to this day as an indication of the Italian origin of modern banking. The introduction of the bill of exchange marked an important stage in the history of commerce. The function of the money-changer became so important, that the leather purse (bourse) became a symbol of commerce in general, as is shown by the illustration onp. 669 depicting Mercury as holding a purse in his hand. Very soon there were fairs where no trade at all was done in goods, but only in bills of exchange. Of particular importance was the fair of Lyons, which was frequently visited by the shrewd Genoese merchants.

It was at this stage that the abstraction of commercial procedure began, which led to the development of the system of credit, banks, securities and the Stock Exchange, finally culminating in forward-contract and produce-exchange.

	The state of the s
	The state of the s
	The state of the s
· · · · · · · · · · · · · · · · · · ·	
	The state of the s
	· · · · · · · · · · · · · · · · · · ·
	attach in the second se
	Navy Blues on Piece Goods 👚 🗏
	Naw Blues on Diese Hoods
	MUVY DIMES VILE LELE OVVUS —
	At 1 At 101 And
	Neolan Navy Blue 2RL conc.
	reserves cotton and rayon effects 🐪 🚞
	·

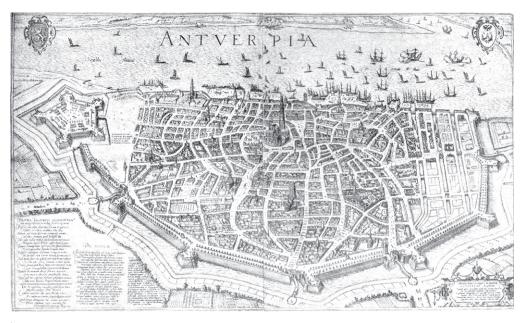
	The state of the s

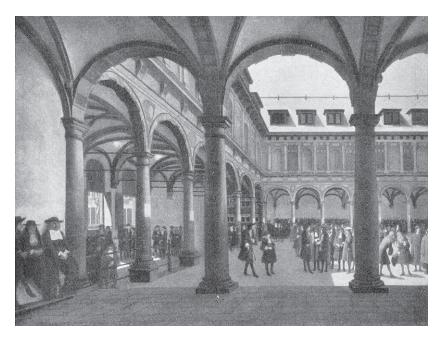
"Since August 1st 1613, every day between 12 and 2 o'clock one may see here the rich merchant whose heavily laden ships bring wealth to the country, the poor wretch who hopes to snatch a mite from Fortune, the sailor, bronzed by tropical suns, and the merchant, pale from long hours in the countinghouse—the citizen of Amsterdam, proud of his capital and his credit, the stranger, filled with amazement at the extent of the trade which goes on here—the parvenu, whose rapid rise to fortune is viewed with envious eyes, and the bankrupt, a scandal in the eyes of all. There one may meet Portuguese and Armenians, Muscovites, Englishmen, and Italians. Like the hum of a bee-hive gossip of the latest events goes about, mingled with reports from the sea, of business-transactions, goods-delivery and insurance contracts. Wool and potash, tobacco and olive oil, furs, soap, and tar, rice, ginger, and chocolate, silk and dried cod, marble and leather, wine and paper, all are bought and sold here." Thus the translation of a Dutch description of the Bourse at Amsterdam in the 17th century.

"Every day" the merchants met to discuss and transact business, to examine goods, and above all to learn and to exchange the latest news. Not quite so full of admiration and of wonder at the cosmopolitan gathering, a manual for merchants of the kind so common in the 17th and 18th centuries, gives the following definition: "Exchange, where the merchants foregather at a certain hour every day to talk over business and to meet the majority of those with whom they have dealings, without the necessity of visiting them at their homes. (After J. P. Ricard, "L'Art de tenir les livres", 1724. The author was the son of Samuel Ricard, from whose "Traité Général du Commerce de la Hollande et d'Amsterdam", 1705, the engraving reproduced on p. 686 is taken.)

The Bourse was a regular meeting-place of the merchants. What had formerly taken place periodically at fairs and markets—the meeting of vendor and purchaser, of goods of different kinds for purposes of exchange, of goods and money or goods and bill of exchange—now became a permanent institution. International trade was for the people of the town no longer an event of a few weeks duration; trade and its organization had become the centre of the life of the city. The plan of Antwerp of 1589

The city of Antwerp. Engraving from the year 1789. In the centre of the town, in the broad street leading in an arc to the cathedral, is the Bourse.





Inner courtyard of the Bourse of Amsterdam. Painted by Job Adriaensz Berckbeyde (1630–1693). Rijks-Museum, Amsterdam.

(see ill. p. 672) makes this fact plain. The Bourse attracts the crowd like a magnet—nothing could symbolize the municipal character of commerce better than this magnetic field of a flourishing city with the Bourse as its centre.

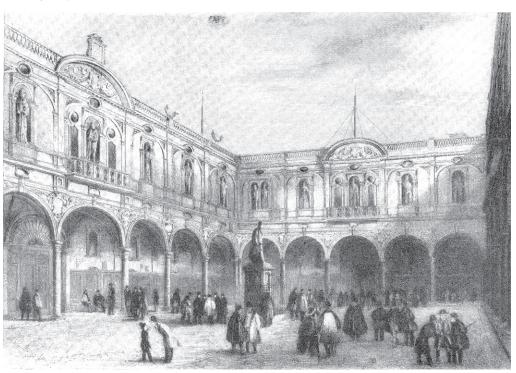
The bourse or exchange of the late Middle Ages and the earlier stages of world trade until well into the 19th century has very little in common with the modern produce-exchange, where goods not available on the spot are traded in universally recognized quantities and standards of quality. For though these early exchanges were above all meetingplaces of the merchants, like a guild-house or club, they were also warehouses and markets for all the goods which figured in the trade of the period; "a promenade where Moors and Northmen trade together" was the description of the Bourse of Amsterdam contained in a poem extolling it. Colonnaded halls and galleries round a large open square in the centre always made up the groundplan of these meeting-places of international trade (see ill. above). Soberly clad aldermen and merchants walked up and down with measured, dignified gait, the flowing robes of grave Eastern visitors adding a flash of colour to the scene; with sweeping Gallic gestures a merchant might be seen greeting an elegantly clad acquaintance, perhaps congratulating him on some successful piece of

business. Some distance further a Spaniard is seen relating his experience of overseas trade with a very superior air. An engraving of the Royal Exchange, London, of the year 1674, stresses the social aspect of the institution; ladies in wide, hooped skirts, and exquisitely dressed dandies look down into the courtyard; they are probably on their way to visit the stalls in the "Pawn", the upper floor, where, as Addison relates, charmingly insistent young women offer books, lace, ribbons, and handkerchiefs for sale. Two wouldbe duellists are seen facing up to each other an affair which has certainly nothing to do with the exchange of goods; it will probably not be long before the beadle ejects the two young gentlemen, just as he is seen in an earlier London scene by Hollar, driving boys at play from the scene of serious business.

There is no sign of goods in the picture. They are offered for sale on the first floor or are kept in adjacent warehouses. Nevertheless—unlike the modern produce-exchange—the goods were always available, and no transaction was completed, until they had been seen and examined. In the hall of the exchange conversations and negotiations were carried on, but to complete the business vendor and prospective purchaser made their way to where the merchandise was stored, in order to test it and weigh it before it changed hands, finally shaking hands on the deal (cf.

Ciba Review No. 6, p. 190) and exchanging the handsel or earnest, a token payment to indicate the completion of the sale. In the Netherlands especially, where the granting of credit facilities is of much later date than in England, handshake and handsel marked the conclusion of a transaction as late as the 18th century. In 1518, in the "Agreement of the Rights of English Merchants" of Antwerp it was laid down that English cloth should only be measured before the handshake (ante palme dationem, hoc est voir den coopslach). To how great an extent commerce was at that time a personal matter between the contracting parties, is illustrated by the saying: "De marchand à marchand il n'y a que la main." It is true that credit and banking business, bills of exchange, etc. had long been known the Banco di Rialto in Venice was founded in 1587, the Banco del Giro in 1619, the Amsterdam Wisselbank in 1609, the Hamburg Giro Bank in 1629, and the Banco Publico, Nuremberg, in 1621. Trade on a large scale with foreign goods and countries was an established thing, for which, in place of market-stalls, permanent buildings were erected. Nevertheless, the abstract form of doing business, which characterizes the modern goods-exchange, would have been incomprehensible in a bygone age. The institution of the exchange or bourse is an eloquent illustration of the fact that unrestricted communication between merchants is a necessity of trade. As a place where at a certain hour of every day fellowmerchants met, news and information were exchanged, it first developed in medieval Italy. Already in 1294 there was a Foro dei mercanti at Bologna, and in 1426 the "Lonja" of Palma de Mallorca on the Balearic Islands was established. Perugino (1450-1523) painted the Cambio of Perugia, the town from which he took his name. Many Italian cities had and still have their "Broletto", usually an arched hall, and on certain days of the week the small silk-merchants may still be seen standing there in groups, each with a few strands of silk or some sample cocoons. The large firms have moved to the exchange with its modern, rationalized methods of procedure, but the small trader, who cannot hope to compete with such organizations, has remained faithful to the old form of doing business in the "Broletto", "Galleria", or café. He has remained behind in more senses than one.

The courtyard of the second Royal Exchange, London, shortly before the fire of 1838.



When the northern countries with their cold and rainy climates joined Italy and Spain in competing for the markets of the world, solidly constructed houses were built for the meetings of the merchants. It is perhaps no mere accident that these buildings resembled in their plan of construction the square of St. Mark in Venice.

The architectural model of every exchange building in northern and western Europe was the Bourse of Antwerp—built in 1485 and rebuilt in 1531 (see front page). During the age which followed the discovery of America Antwerp was the leading city in world-trade. It was the Bourse of Antwerp which gave rise to the idea of building a similar institution in London. This enterprise was an expression of civic pride, an eloquent testimonial to the position of consequence to which the merchants of the City of London had risen under the Tudors. Richard Gresham, a member of the Mercer's Company and of the Corporation of the Wool Staple of Calais, was Lord Mayor of London and a friend of Cardinal Wolsey's. In 1537 he received a knighthood from Henry VIII. In the course of his travels to the Low Countries, Gresham frequently had occasion to visit Antwerp. Following the pattern of the Antwerp exchange he drew up plans for a "goodly burse" to be erected in London for the convenience of his fellowmerchants. The project was not carried out during Gresham's lifetime. Its realization was left to his son, Sir Thomas Gresham (1519 to 1579). For twenty years he was factor to the English Crown at Antwerp, and it offended his pride to think that in the great city of London, which was so soon to outstrip Antwerp, the merchants had to walk up and down Lombard Street in the rain "more like pedlars than merchants". In 1566 he succeeded in convincing his colleagues of the necessity of making an end of this unworthy state of affairs. Between them 750 merchants subscribed £ 40,000, which were used to acquire a site. Gresham himself paid the building-expenses; workmen were brought from Flanders, stone imported from Flanders and the Levant in Gresham's ships. The building was destroyed in the Great Fire of 1666, but was speedily rebuilt on the same plan, though in a slightly more ornate style (see ill. p. 676). In 1838 the Exchange was again destroyed by fire, and the present building dates from that period. In 1880 the inner courtyard was roofed with

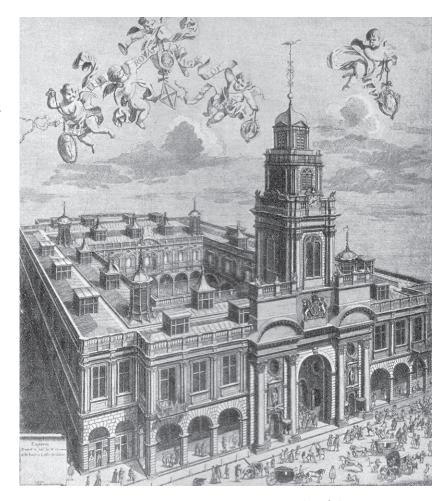


The Bourse of Huelva, Spain.

glass, but except for a few hours a week it is silent and deserted; no merchant need go there for news or to change foreign bills, transactions in goods have been transferred to separate exchanges, and the storing and retail sale of goods have no longer a place in the exchange. The flooring alone of Gresham's building withstood the two great fires; the stones still form the pavement of the Royal Exchange, a name conferred by Queen Elizabeth, when on Jan. 23rd 1570 she visited Gresham's noble building in state, preceded by heralds and flourishes of trumpets. About 275 years later Queen Victoria opened the third Royal Exchange at the same place.

The close connection of the House of Tudor and of later English monarchs with the City of London as the foundation of the modern English social structure, of its wealth and its liberties, thus finds expression in the history of the Royal Exchange. It is called the "Royal" Exchange, but Gresham's emblem, the grass-hopper, adorns the tower. The secularization of thought, the share of citizens and merchants in the dominion of the world are demonstrated by the numerous poems eulogizing the great exchange buildings of the 16th and 17th centuries. An engraving of the Royal Exchange by W. Hollar (1607–1677) bears a cartouche with the following verses:

"Lo here the modell of Magnificence The Exchange of London through Europe fam'd Erected first by Gresham's great expense The second
Royal Exchange
building.
Engraving 1674.
On the balcony
to the right
of the door,
a group of gallants
and ladies.
To the left
of the doorway
two duellists.
Engraved by
W. Sherwin.



And by the Roial'st Queen the Royal nam'd. The Mother Antwerp far excelling, where But emptiness is found and trifles sold. Arabian odors, Silkes from Seres heere, Pearles, sables, fine linnen, Jewels, clothes of gold..."

Less grandiloquent, but equally expressive is a description of the Amsterdam Bourse, which may be rendered into English as follows:

"The church where Jews and Turks and Christians congregate
The school of every language, the market of all goods."

The same cosmopolitan note, suggestive of freedom of trade for merchants of every race and tongue—"in usumnegotiatorum cuiscumque nationis ac linguae"—is struck by Addison in his reflections on the Royal Exchange: "I have often been pleased to hear disputes adjusted between an inhabitant of Japan and an alderman of London; sometimes I am

jostled among a body of Armenians, sometimes I am lost in a crowd of Jews, and sometimes make one in a crowd of Dutchmen, I am a Dane, Swede or Frenchman at different times... It gives me a secret satisfaction to see so rich an assembly of my countrymen and foreigners consulting together upon the private business of mankind."

It is indeed the business of the whole of mankind which is transacted at such gatherings. A list of commodities of June 4th 1674 from the Amsterdam Bourse may convey some impression of the scope and volume of trade at that time. Among the principal items are: Spices, sugar, dyes (alum, cochineal), drugs, whale-oil, dried codfish, honey, oil, colonial products, rice, olives, raisins, soap, hides, wine, tin, lead, wax, wool, and linen. As is shown by a price-list of the textiles traded at the Amsterdam Bourse in 1719, cotton, one of the most important commodities of the

modern produce-exchange, was at that time a comparatively insignificant factor in the commerce of the world.

The beginnings of exchange dealings in the modern sense of the word may be seen in the trade based on samples and patterns. For certain articles easy to define, contracts to order were known in the Middle Ages. Certain types of textiles were universally recognized, e.g. in the 16th century, linen of Osnabrück, English canvas, Ulm fustian, etc. Nevertheless, this is not to be compared with the modern standardization of cotton according to types and grades. Even though in the Middle Ages goods might be ordered which were not immediately available, the contract was never made absolute until they were presented and personally taken over by the purchaser. Thus in 1318 a Canterbury clothmerchant requested the weaver who supplied him to send patterns of cloth, adding that when he had seen patterns and prices he would send a man to select the cloths and bring them to Canterbury. It was only with the improvement of postal service and transport towards the end of the 17th century that the volume of such business based on samples increased, but it must be remembered that these samples were for a single order only, not a generally recognized standard like "Low Middling" or any of the other grades of cotton, which make it possible to place an order without having seen the bulk of the goods. It was this substitution of types for samples that made the modern produce-exchange possible. Business on the basis of samples first developed on a large scale in the grain-trade. The needs of armies, especially in France, and at the same time the growth of large cities necessitated the transport and storage of hitherto unheard of quantities of goods, thus constituting wholesale trade on a modern scale. But for a long time this trade by samples was considered a breach of good form. Even a man of such independent mind as Daniel Defoe (ab. 1661-1731), the author of Robinson Crusoe and of numerous economic essays, rejected the idea of trade by samples; he realized that the economic conception and organizations of his time were not equal to commerce on this vast scale, and he justly feared that the purely speculative type of businessman would derive the real profits. On the other hand Defoe as a representative of the idea of cautious middle-class progress was by

no means blind to the necessity of adjusting the methods of trade to the requirements of increasing supply and demand. Whilst in Germany the author of the "Allgemeine Schatzkammer" was writing "Kreditgeben ist immer eine kützliche Sache" (credit-giving is always a ticklish business), Defoe was loud in his praises of credit, saying that in England two-thirds, often even four-fifths of the entire sale of goods took place on a credit basis. Continental merchants were much more cautious, even at the Amsterdam Bourse the greater part of business was on the principle of cash. That may perhaps be taken as a sign that predominance in world trade was passing from the Continent to England, where its centre was to become the Royal Exchange.

Purchase on credit is, however, not to be identified with the forward-contract. Though from the 17th century onward and especially during the fever of speculation in the 18th

Sir Thomas Gresham, the founder of the Royal Exchange (1519–1579), aged 25 years. Painting sometimes ascribed to Holbein. Mercer's Hall, London.



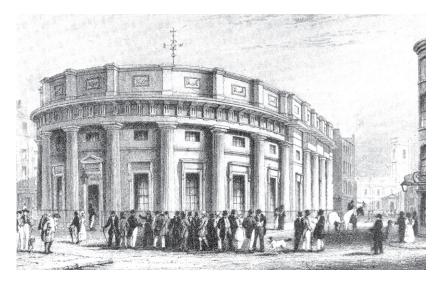


Business-card of the Royal Exchange Assurance Company, the offices of which are still in the Royal Exchange, which is shown in the centre of the card. Guildhall, London.

century, dealings in stocks and shares had assumed a volume difficult to control, transactions on the produce-exchange remained transactions at sight. Blanco dealings, i.e. the purchase of goods before manufacture, remained the prerogative of a few purchasers who were in a great measure independent of purely economic considerations, chiefly the autocratic states and their armies. The aim of genuine exchange-transactions is to profit by, or to bridge, price-risks. That is the principal function of the modern goods-exchange, the result of further extension and standardization of the economic system. This development brings us to the age of industry in the full sense of the word, with its large-scale production of goods, the most extensive markets for which are the vast cities which the industry has itself created. The increased supply

and demand made it necessary for the various branches to specialize. In 1801 the dealers in securities left the "Exchange" to take up their quarters elsewhere, and by degrees the other produce-exchanges followed suit. The "permanent fair", as Guicciardini had justly termed the bourse early in the 18th century, was split up into a series of special markets. Grain, coal, oil, coffee, metals, tobacco, etc. and especially cotton as the most important overseas products, all have their own exchange-organizations, and have developed individual standards and methods of business.

As already indicated, wool is not a suitable commodity for transactions on the exchange. The kinds and qualities are too numerous to admit of satisfactory business being done without inspection of every consignment. When during the Great War the British Government assumed control of Australian wool-imports, the sorters divided the crop of 1916 into 847 different classes. What is usually known as the wool-exchange of London, is in reality an auction held every two months, where one half to two-thirds of the wool of Australia and New Zealand are sold to the highest bidders. On the morning before the sale, the purchasers—usually acting for a small group of importers, in whose hands the wooltrade lies—examine the quality of the consignment offered for sale. That the wooltrade is not comparable to dealings on the exchange is shown by the fact that all payments are due within a week of the auction, and that the wool must be removed from the warehouses by the purchaser within a fortnight.



The Manchester Exchange.
After an engraving by M. J. Starling, 1835.

There are no forward-contracts, and speculation finds very lit scope; for that reason price-fluctuations greater, and affect the producer more than is the case in the cotton-industry.

A not inconsiderable amount of wool, especially in the United States, is bought in local markets, in some cases straight from the breeder. Furthermore, auctions in the production-areas overseas tend to become more frequent, sales are held regularly in the ports of Australia, the most important country for the production of raw wool, and these cities are beginning to rival London as the most important wool-market. Other towns where considerable wool-auctions are held are Liverpool (for East Indian wool), Amsterdam, Le Havre, Roubaix-Tourcoing, Hamburg, Marseilles, and Antwerp.

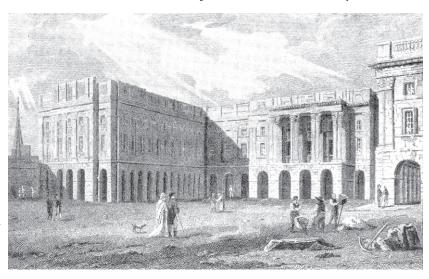
For cotton, on the other hand, the exchange form of business is fully developed. The demand remains fairly equal all the year round, and comparatively uninfluenced by price-fluctuations. It is the function of the exchange and the trade organized there to distribute the supply, which appears at intervals with the harvest in the various areas of production, systematically over the whole year. The principal European cotton-market is Manchester, where an exchange was built in 1729. Like the exchanges of the 15th-18th century the Manchester exchange does not, however, confine itself to trade in one commodity, and does not admit forward-sales. For spotgoods it is the greatest market in the world, a "magasin général du monde" as Le Moine de



Business-card of a London watch-maker, in four languages, illustrative of London's importance as a centre of international trade. 1780. Guildhall, London.

l'Espine described the Amsterdam Bourse at the beginning of the 18th century.

The greatest English cotton exchange for forward-goods is Liverpool. It was there that in 1870 John Rew introduced the "hedge" or forward-contract, as a protection of the manufacturer against price-fluctuations (to hedge = to back a second horse in order to counteract possible losses on the first).



The Liverpool
Exchange,
completed 1808.
After a
drawing by
J. R. Thompson
(1785–1866).

The other great cotton markets for forward-goods are New Orleans, the centre of the great American producing area, Chicago, New York, where the greatest number of forward-sales are contracted, but very little business in spot-goods is done, as the exchange is neither near an important producing nor manufacturing district; Bremen, which has permitted forward-contracts only since 1925; Bombay is the exchange for the ever-growing Indian market; Osaka is the Japanese cotton-

exchange; the cotton exchange of Alexandria was founded in 1861 for the Egyptian market, while that of Le Havre serves the French market.

The fact that all kinds of goods are traded in the one hall at Le Havre may be taken as a remnant of the earlier type of exchange. They are exhibited in open halls just as in the old days, where men like Gresham, Ouvrard, or Rothschild ruled the commerce of the world.

A small addition of Albatex PO

to neutral or alkaline dyebaths

assists the levelling and penetration

of Vat Colors

Direct Colors

Sulphur Colors

Union Colors

Acetate rayon Colors

Practical hints

The Carbonisation of Acetate Silk in Wool-Acetate Rayon Mixtures

Now that acetate rayon is used so frequently for effect threads in woolen materials, the question of the best method of the carbonisation of the acetate rayon portion of such fabrics is of great practical importance.

It is well known that acetate rayon is very resistant to acids and the usual carbonising methods leave this fibre unchanged in the mixture. The presence of unchanged acetate rayon in a carbonised material would lead to the most undesirable effects in subsequent dyeing operations.

In such mixtures the acetate rayon must first be regenerated into cellulose. Only if carbonisation is deferred until the process of regeneration is completed, will the removal of all vegetable components from the material be ensured.

The regeneration of the cellulose from acetate rayon is carried out quickly and completely by treatment with alkali at increased temperatures. It is, however, necessary to be careful not to damage the wool by such treatment.

Experiments have shown that acetate rayon is completely saponified by a two hour treatment at 95° C. with 5 g. caustic soda (36° Be.) and 2 g. soap per litre. A skein of acetate silk treated in the above manner was introduced into a woolen fabric and carbonised for one hour with 5° Be. sulphuric acid at 100° C. The result was that the acetate rayon was completely carbonised and could easily be entirely removed from the fabric.

A further experiment was performed on a woolen piece containing acetate rayon. The fabric was treated for 2-3 hours at 60-70° C. with 5 g. caustic soda (36° Be.), 3 g. soap, and 10 g. Cellex per litre. This

was followed by carbonising for 1 hour at 100° C. with 5° Be. sulphuric acid. Here again the acetate rayon was completely carbonised and easily fell away from the material. An examination of the wool to see whether the alkali treatment had caused any damage, showed a negative result; the handle was still good.

In another experiment 2 g. Thiodiglycol were used instead of soap and 2 g. Ultravon W per litre replaced the Cellex in the saponification. The carbonisation of the acetate rayon was again complete without causing any damage to the wool.

It should be noted that the saponification must not be carried out at too high a temperature so that the action of the alkali on the wool is restrained. At 60–70° C. with the above mentioned concentration of alkali, the wool is not noticeably attacked, whilst the acetate rayon is completely saponified.

Without guarantee

Ciba Dyeing Labs.

The Removal of Rust Spots from Fabrics

It is generally recognised that rust spots cling very tenaciously to textile materials and for example that treatment with oxalic or citric acid is in most instances almost without effect.

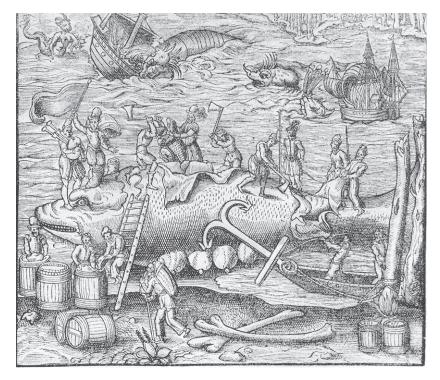
The rust (ferric oxide) can only be dissolved by very prolonged action of dilute mineral acids, and even this treatment is only completely effective at increased temperatures. Such a treatment can only be carried out, particularly on vegetable fibres, under extremely careful control or else the fabric will be tendered.

Rust specks can be easily removed from yarn and fabrics by spotting with an almost cold solution of sodium hydrosulphite which reduces the ferric oxide to the greenish grey ferrous oxide. The latter can then be completely removed by a treatment with 2 g. conc. HCl (20° Bé.) per litre at 35° C. followed by thorough rinsing in water.

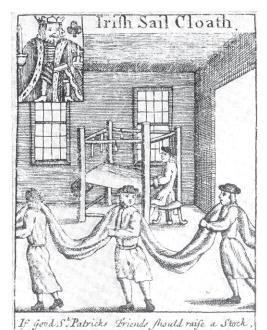
It was the Italians, the boldest pioneers of trade, who during the Middle Ages made the first attempts to engage in long-term contracts for the supply of raw materials. In view of the rule that "nobody cares to buy clothes before they are made" it was an unusual decision which in the 13th century brought Italian buyers to England where they signed contracts securing to them for a number of years the entire wool-crop of a monastery. Such a contract for a period of ten years dating from 1284 has been preserved. The prices were, however, not fixed, and the actual purchase was not made, until the wool was grown. This individual character of medieval business transactions, based on the actual presence of the goods, cannot be emphasized too strongly. Such contracts merely served to ensure the supply of raw materials, they had nothing whatever to do whith speculation.

Speculation can result from such long-term contracts only when profit-margins and not the goods themselves are the first consideration. During the early capitalist period, from the end of the Middle Ages to the close of the

18th century, when discoveries and inventions disrupted the century-old equilibrium of society, when unheard-of and infinite opportunities raised hopes of rapid gains, the element of speculation first made itself felt in the economic system. Money and bills were the first items to be thus affected; the more abstract and intangible character of these commodities may have made them appear more conducive to fantastic transactions than is possible in the case of goods with a clearly defined and restricted use. It is therefore by no means accidental that the goods which first became the vehicle of speculation came from strange and exotic quarters of the globe, and that the time factor in their delivery was a matter of complete uncertainty. The earliest forwardcontracts referred to whaling. The catch of a whaler or fleet of whalers was bought before the expedition set out, in the expectation of indefinite profits if the booty should prove larger than expected, or if prices should rise in the meantime. Everything concerned with whaling was strange and unpredictable; unknown and fraught with danger was the sea



The earliest forward-contracts were concerned with whaling. Cutting up a captured whale. From the Latin edition of the works of the French surgeon Ambroise Paré, (from 1510(?) to 1590), Paris 1582.



Playing card, from the satirical series "All the Bubbles", 1720. The lines make fun of the project of weaving Holland cloth on Irish looms. The property of the Worshipful Company of Makers of Playing Cards. Guildball, London.

And make in Trift Looms true Holland's Duck,

Then Shall this Noble Project by my Shoul

No longer be a Bubble, but a Bull . ..

in which the animal lived, uncertain the fate of ship and crew, almost legendary the whale itself, which was pictured as a weird and fantastic monster (see illustration on page 683). There was no telling when the whaler would return, what the catch would be, or what profits it would yield. The element of gambling in this early form of speculation is unmistakable.

So irrational and chaotic were the minds of men in that feverish age of expansion, that treasure-hunting and the philosopher's stone again found believers and exploiters of belief. One of the most striking features of the age is that in a society which had broken away from all traditional ties and established values, and did not know where the bounds and laws of the new universe were to be sought, such fantastic speculation should exist side by side with a system of rationalist philosophy. A link between the two may be seen in the manual of book-keeping of J. P. Ricard, who as late as 1724 saw nothing incongruous in placing financial and philosophical speculation in close

proximity to each other. Ricard recognizes the gambling element in such ventures clearly enough, which in his opinion are based on speculations, some of which may end well, others disastrously. He admits frankly that gain is the sole motive of all trade. The speculative merchant is the central figure in worldtrade as conducted at the bourse. By degrees speculation was directed into normal channels; the gambler became the professional broker or jobber, though the tendency towards rationalization, which runs through the entire economic history, was never so strong as in the manufacturing side of commerce. The element of forecasting and gauging the future is ever present where dealings on the exchange are concerned—and yet, how great is the difference between the terse and mathematically tabulated exchange-report of today, which records fluctuations of fractions of a penny, and Ricard's description, to whom blind plunging into success or disaster appeared as familiar as a rational estimate of an economic situation seemed impossible: "More luck than reason -and it is the fools who win in the long run."

Playing card from the series "The South Sea Bubble". The property of the Worshipful Company of Makers of Playing Cards. Guildhall, London.





Playing card from the series "The South Sea Bubble". The wives of sufferers signing a petition for Government assistance. The property of the Worshipful Company of Makers of Playing Cards. Guildhall, London.

A few examples from the early history of speculation may serve to explain this scepticism.

The Tulip Mania

Perhaps the strangest fever which ever befell the world of business was the tulip mania, which raged in Holland from 1634-1637. During the first half of the 16th century the tulip was introduced into Europe from Constantinople. It is probable that Conrad Gesner was the first botanist to notice a tulip in Germany in the garden of a certain Johann Heinrich Herwart at Augsburg in 1599. Half a century later it had become a familiar sight in the gardens and parks of Holland, where it flourished in many colours and varieties. Without apparent reason a craze for these flowers arose in 1634; it soon assumed dimensions which can only be explained as the results of speculation. Nobody knew how or why the passion arose, but nobody wanted to be left behind in the race for gain. Fantastic sums were offered for a single bulb. In one case the following was paid:

	valued at
2 loads of wheat	
2 loads of rye	558 ,,
4 fat oxen	 480 ,,
8 fat pigs	
12 fat sheep	
2 hogsheads of wine .	 70 ,,
4 barrels of beer	 32 ,,
2 barrels of butter	 192 ,,
1000 lb. of cheese	 120 ,,
1 complete bed	 100 ,,
1 suit	 80 ,,
ı silver mug	60 ,,
	2500 fl.

Tulip bulbs became objects of trade and speculation to such an extent that not infrequently shares were bought and sold in a bulb which nobody owned, and which might never bloom. A single blossom often changed hands a hundred times. To use the jargon of the modern exchange, forward-sales were the rule, spot-goods were not desired.

As late as 1733 Zedler's "Universallexikon" describes the mania in words which still carry the ring of horror at such folly: ... The merchants were so blind that some tulips were sold twenty or thirty times without one of the purchasers ever having seen them; nor was all this buying and selling done for cash, but all on credit and delivery in the tulip-season... Everybody engaged in this traffic, young and old, men and women, peasants and nobles, messengers, mariners, sea-captains, carters, turf and wood porters, the very chimney-sweeps left pole and brush hanging in the chimneys, and rushed off to join in the trade. This mad confusion reminds one of the scenes of robust life which find expression in the peasant and drinking-scenes of the Dutch painters.

On Feb. 3rd 1637 the report that the price of a tulip had fallen from 1250 to 1000 guilders sufficed to prick the bubble. The government and the municipal corporations were called on for assistance, but all to no purpose; nobody wanted to have anything to do with the bulbs, which had suddenly lost all their mysterious value, and had once more become mere tulip plants. Many people who had made huge profits on paper were now as poor as ever. It is significant that few large companies were affected by the crash, but for the small fry of speculators and gamblers the shock had been all the more severe, as this was for many the first time that they had burnt their fingers.

The Age of Projects and the South Sea Bubble

"About the year 1680, the art or mystery of projecting began visibly to creep into the world", wrote Daniel Defoe in 1697 in his "Essay on Projects". The shrewd and competent critic of his time was always suspicious of jobbers and speculators. Between 1700 and 1750 France, too, produced numerous makers of projects. Feverish attempts at the rapid achievement of wealth characterized the final period of absolutism and of the mercantile system, which was also the age which marked the rise of the middle-classes. All these enterprises consisted at bottom in the creation and exploitation of price-fluctuations. Professional speculators appeared at that time; but unlike the legitimate exchange-broker, they did not forecast and profit by natural price-fluctuations, thus deflecting risks from industry, but created artificial booms for the fraudulent exploitation of others. Behind the companies formed for such purposes, there was often no economic reality whatsoever. The promoters promised to found something, money was advanced to them, others who hoped for rapid profits also clamoured for shares; prices rose, shares were sold and bought anew, until finally the whole edifice collapsed, and with it the fictitious profits of the shareholders.

In 1711 a company was floated in England under the name of "Merchants of Great Britain trading to the South Sea and other Parts of America and for the Encouragement of Fishing". In 1720 it actually took over the national debt, in exchange for which the revenue from various taxes was ceded to the company. For the purpose of economic exploitation it received a monopoly of British trade with South America and the islands of the Pacific, in addition to the monopoly of the slave-trade with Spanish America. Capital was to be raised by converting Government bonds into shares of the company, and within a few weeks more than half of the holders of such bonds acquired shares in the South Sea Company. These shares rose from day to day; in Jan. 1720 they stood at 128, in June at 890, in July at 1000. A wave of projects and speculation swept over England. Ladies and gentlemen of fashion, lawyers, clergymen, artisans, nobles, soldiers, in short, everybody who had any money to spare or could borrow any, plunged into speculation. No man wished to be left out of things, when his neighbour had



Title-page of Samuel Ricard's "Traité général du commerce de la Hollande..." 1705. In the background the weigh-house of Amsterdam, beside which was the Bourse.

sold his holdings with so much profit, or when some new and tempting project was announced. In the week from June 4th to June 11th, 1720, new companies were founded with a capital of £ 224,000,000. The extent to which folly had gone may be gauged from the title of one of these foundations: "A Company for carrying on an Undertaking of great Advantage, but nobody to know what it is." The public were requested to take up 5000 shares at £100 each, of which sum £2 were to be paid on deposit. The payment of £2 was to entitle each shareholder to a yearly dividend of £100 per share. On the day following this fantastic announcement the promotor relieved a thousand people of £2 each between 9 a.m. and 3 p.m., which left him time to decamp to the Continent on the same day. In Change Alley one cynical wit opened an office for the purpose of floating a company with a capital of £1,000,000, in order to exploit some secret project. Next day there was a notice in his window, saying that subscribers' money would be returned, as the promoter had merely wished to find out how many fools one could catch in a day.

By degrees the public became doubtful, and on July 12th 87 projects were declared to be illegal. A number of these companies were concerned with quite feasible projects, e.g. the manufacture of silk and cotton goods, the improvement of the process of silk-manufacture or of the British woollen-goods factories, the floating of a company to purchase land for madder-growing, etc. The degree which uncritical speculation had reached is, however, shown by the fact that there was a company for the manufacture of the "perpetuum mobile" or—utterly farcical—"Puckle's Machine Company for discharging round and square canon-balls".

Shortly afterwards the South Sea Bubble

also burst. In February 1721 a Parliamentary Commission exposed at least a part of the vast fraud, in which many political figures of the day, even ministers of the Crown, were implicated.

After the fraudulent character of these various enterprises had been revealed, a pack of playing-cards was produced, each card bearing a satirical picture, illustrating "All the Bubbles" (cf. ill. pp. 684–685).

The reaction was general, resulting in a serious depression and loss of confidence. Few people had passed through this hectic period unscathed. It is said that among foreign shareholders only the Canton of Berne in Switzerland reaped substantial profits.

Works of Reference

The history of the Exchange is closely connected with that of trade and commerce in general. In the following bibliography some of the most important works are listed.

General Manuals

Encyclopedia of the Social Sciences. New York 1935. Article: Commodity Exchanges.

Handwörterbuch der Staatswissenschaften. Jena 1925.

Article: Märkte und Messen, Article: Börse,

Marperger, Paul Jacob: Neueröffnetes Handelsgericht oder wohlbestelltes Commercien-Collegium Hamburg 1709.

Savary, Jacques: Le parfait Négociant ou Instruction générale pour ce qui regarde le Commerce des Marchandises de France et des Pays étrangers. 1675.

History of Commerce

Baasch, Ernst: Holländische Wirtschaftsgeschichte. Jena 1927.

Bredius, Abraham: Amsterdam in de 17. Eeuw. s'Gravenhage 1897–1904.

Ehrenberg, Richard: Große Vermögen. Jena 1902. Lamprecht, Carl: Deutsche Geschichte. Berlin 1902. Salzmann, Louis Francis: English Trade in the

Salzmann, Louis Francis: English Trade in the Middle Ages. Oxford 1931.

Selfridge, Harry Gordon: The Romance of Commerce. London 1923.

Sombart, Werner: Der moderne Kapitalismus. München and Leipzig 1924/27. (Contains numerous references.)

Fairs and Markets

Antiquities in Sturbridge Fair. Bibliotheca Topographica Britannica No. XXXVIII. London 1786. Walford, Cornelius: Fairs Past and Present. London 1883.

Wheatley, Henry B.: London Past and Present. London 1891.

History of the Produce Exchange

Beard, Miriam: History of the Business Man. New York 1938.

Burgon, John William: Life and Time of Thomas Gresham. London 1839.

Garside, Alston Hill: Specimens of Cotton Hedging. New York 1934.

Garside, Alston Hill: Cotton goes to Market. New York 1935.

Landmann, Julius: Vorträge aus dem Nachlass. Basle 1933.

Smith, John George: Organized Produce Markets. London 1922.

Speculation

Mackay, Charles: Memoirs of Extraordinary Popular Delusions. London 1841.

Briefwechsel des Balthasar Baumgartner. Literarischer Verein in Stuttgart, Nr. 204.

Neolan RED GRE

Exceptionally level dyeing and excellent fastness to light

Sapamine KW

improves the fastness to water of substantive colors and at the same time imparts an unsurpassed soft handle

Historical Gleanings

Daniel Defoe (1661-1731)

Daniel Foe-the prefix was a self-conferred embellishment of later years—was born in London as the son of a well-to-do Nonconformist butcher. He came of that "middle State, or what may be called the upper State of Low Life", which the father of Robinson Crusoe, his most famous hero, eulogized as "the best State in the world, the most suited to Human Happiness, not exposed to the Miseries and Hardships, the Labour and Sufferings of the Mechanick Part of Mankind, and not embarassed with the Pride, Luxury, Ambition, and Envy of the Upper Part of Mankind". Through all the vicissitudes of his stormy career as a successful business-man, fugitive defaulter and political spy, a career which brought him poverty and disgrace, literary fame and the ignominy of the pillory, Defoe strove to retain the balance between the caution of the calculating man of business and the impetus of a strong imagination. He is the genuine representative of the two worlds to which he belonged, that of the Nonconformist merchant, who regarded material success as an indication of Divine favour, and that of the freelance man of letters, of which class he was one of the earliest examples. He wrote novels, tracts, economic treatises, books of travel, and political pamphlets.

The two sides of his nature find eloquent expression in the "Essay upon Projects" of 1697. He is not concerned with projects of the kind which served their promoters as a means of exploiting the credulity of those who might be induced to entrust them with their money. Basing his reflections on the axiom that "Nothing can support Credit, be it publick or private, but Honesty". Defoe subjected many economic, social, and other evils of his age to a critical survey. Many of his "projects" would be better named reforms, e.g. one referring to an increase of capital and credit-facilities of the Bank of England, which institution had been founded in 1692. In 1697 already Defoe's proposals were realized. At that time he was in collaboration with "some eminent persons" (the ministers of William III) who had consulted him on question of taxes and of financing the War of the Palatinate Succession (1689-1697). In this capacity Defoe was in touch with many financial experts, and it is not easy to say whether, in his rôle of a publicist, he was expressing their ideas or his own.

Other projects were more comprehensive and more vague; one of these was the idea of a state-controlled office, which was to be a kind of labour-exchange for seamen, with powers to fix their wages, and to inaugurate a system of unemployment benefits by means of contributions of employers. Other plans were an academy for the purification of the English language, and a college for women.

Defoe was convinced that his age was one of boundless opportunity, in which the middle classes would rise to wealth by prudence and industry, whilst dis-



Daniel Defoe (1661–1731), the author of "Robinson Crusoe" and numerous economic essays. Engraving by M. van der Gucht (1660–1725).

honesty and rashness could only lead to shipwreck. Thus Robinson Crusoe, the first merchant to become the hero of a novel, was plunged into misfortune through following the "dictates of his fancy", but prudent exploitation of the resources of his island preserved him, while the honesty of his friends made it possible for him to return to a life of ease and security.

It was this spirit of responsibility and of far-seeing projects which attracted Benjamin Franklin (1706 to 1790), who in his autobiography ascribed his own turn for practical affairs to reading the Essay upon Projects.

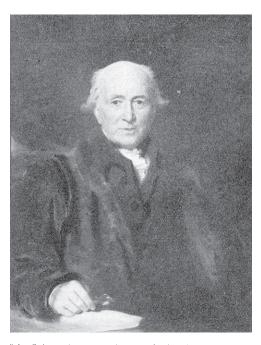
Ch. L

English Coffeehouses and their Significance for the Exchange

In the 17th century the medieval order of things had finally disappeared. With the new religious movements a new class of people began to play a part in the political and economic life of the community; new forms and centres of social life developed, one of the most important of these, not the least for the world of business, was the coffeehouse.

It is difficult to imagine today, how important coffee and coffeehouses were at one time for the social life of England, the robust and loquacious character of which differed strikingly from the more restrained and decorous convention of the present age. The first London coffeehouse "The Rosea's Head" was opened in Lombard Street in 1652. The proprietor was a young Levantine Pasqua Rosea, whom a merchant named Edwards had brought from Ragusa, that he might prepare his coffee for him in London. The insistence of his friends, who all clamoured to taste the novel beverage, grew too much for Mr. Edwards; for that reason he established Rosea in premises of his own. Very soon London was seized by a veritable mania for coffee-drinking. A movement against the consumption of alcoholic drinks and Cromwell's heavy taxes on spirits favoured the growth of the new fashion. Later, in the years following the Restoration (1660), the people, who had grown thoroughly tired of Puritan severity, were glad of a meeting-place where a stimulating and-compared with alcohol-harmless beverage was to be had at a low price; a cup of coffee cost 2d, the entrance-fee to the coffeehouses 1d. Three thousand coffeehouses are said to have existed in London after the Restoration, but this figure is probably much too large. Nevertheless, between 1680 and 1730 the amount of coffee consumed in London was larger than in any other city in the world. After 1730 tea began to take first place, as the conquest of India provided England with an unlimited supply of that plant, whereas there was as yet no coffee-growing country within the bounds of the Empire.

The principal attraction of the coffee-houses was social rather than culinary. Members of the most varying classes and professions met their friends, colleagues, and rivals on a footing more familiar and informal even than on the Exchange. News and rumours were recounted, the tendency of the markets was gauged or influenced by conversations at these meeting-places. For the rising middle-classes of England, both literary and commercial, the coffeehouses became



John Julius Angerstein (1735–1823), after the painting by Sir Thomas Lawrence. National Gallery, London. Angerstein was known as the "Father of Lloyd's". It was upon his advice that the coffeehouse moved to the Royal Exchange. His collection of paintings formed the nucleus of the National Gallery.

the focal points of daily life. Coffeehouses sometimes assumed the function of exchange-markets, where business was not only done privately between individuals, but was transacted on a large scale. The first



Lloyd's Coffeehouse, London. Satirical drawing of the year 1798.

public auction of wool took place in Garraway's coffeehouse, Cornhill, in 1821. The American Coffeehouse in Threadneedle Street was the meeting-place of merchants trading with America, whilst those who did business with the West Indies foregathered in the Jamaica Coffeehouse.

Until 1918 the Post Office adressed its mail list for Lloyd's Assurance Corporation to Lloyd's Coffeehouse. In 1688 a certain Edward Lloyd kept a coffeehouse which in 1696 moved to Lombard Street, and which became the haunt of all those who were concerned with ships and shipowning. In 1696 Lloyd published a paper "Lloyd's News", its continuation, "Lloyd's List", the oldest London newspaper, dates from 1734, and has long been indispensible for shipping and exchange.

Ships were auctioned at Lloyd's Coffeehouse (see ill.) and a poem of 1700 on the day of "The Wealthy Shopkeeper" states:

"Now to Lloyd's Coffehouse he never fails To read the letters and attend the sales."

In 1710 Steele relates in the "Tatler" that the coffeehouse was "provided with a pulpit for auctions", and he also refers to a custom whereby on the arrival of news a youth "who officiates as the kidney of the coffeehouse" mounted his pulpit and "reads every paper with a loud and distinct voice, while the whole audience are sipping their respective liquors". In 1769 a number of habitués, annoyed at the invasion by various customers who indulged in speculative business, induced a waiter to open the "New Lloyd's Coffee House" in Pope's Head Alley; in 1771 a number of members formed an organization for the care of mutual interests, the so-called underwriters; in 1774 the coffeehouse moved to the Royal Exchange, and the lessees pay a certain rent to the subscribers of the insurance company. The coffeehouse side of the business has disappeared, but the liveried servants of the company, which has occupied a building in Leadenhall Street since 1928 are still called "waiters". Ch. L.

Coffee Houses

In 1615 Venetian merchants brought coffee as a new drink from the Orient, but at first it does not appear to have become popular in Europe. The first country which took to coffee-drinking on a large scale appears to have been England, where in 1650 a certain Jobson opened the first coffeehouse between St. Edmund's Hall and Queen's College, Oxford, under the name of the "Jew and Jacobite".

During the Restoration period Wills' Coffee House in London was the meeting-place of the poets and wits of the age, where Dryden and many other famous writers would meet regularly. In 1671 the first café was opened in Paris, interestingly enough in the vicinity of the Bourse. Through the influence of Soliman Aga, the ambassador of Sultan Mohammed IV, coffee-drinking became fashionable in France. The first coffee-house in Vienna was opened after the Turkish siege of the city was raised in 1683, and the Grand Vizier was obliged to leave his vast supply of coffee behind. Ch. L.



Two casts of a coffeehouse token.

Tokens

When in the 17th century the volume of retail trade increased as a result of the general economic expansion, and the people of the lower middle classes began to take a more active part in commerce, an acute shortage of small coin made itself felt in London. The Stuarts considered it beneath their dignity to issue coins of base metal bearing their image. For that reason, shopkeepers and others whose business involved dealing in small sums of money, decided to find a remedy themselves. Inn-keepers, shop-keepers, and the proprietors of coffee-houses issued tokens, usually bearing only their name, adress and the amount which the token represented.

We reproduce here a token issued by a coffee-house in Exchange Alley, which is more decorative and shows more artistic ambition than most. The inscription surrounding the Turk's head on the obverse side reads "Morat ye Great men did me call". The other side bears the words "Where eare I came I conquer'd all", and in the middle: "Coffee, Chocolat, Tea, Sherbet, and Tobac sould in Exchange Alley".

After 1672 the issue of tokens was forbidden.

Ch. L.

Schopenhauer and the Café

It may appear surprising to find a misanthropist like the philosopher Arthur Schopenhauer (1788–1860) among those who frequent cafés. Among the reasons which induced him to take up his residence at Frankfort on Main he recorded the fact that there were "more Englishmen and more cafés" in that city.

Ćh. L.

The Guinea,

for 150 years the principal English gold coin, was so called because the gold from which it was minted was brought from the Guinea coast of Africa by a company of merchants trading under charter from the British Crown. The crest of this company was an elephant. The coins minted from African gold all bore the sign of the elephant, to which was added in 1675 a castle, hence the well-known name "Elephant and Castle" for an inn.

The first guinea was coined in 1663 under Charles II, and was valued at 20s. As a result of the depreciation in the value of silver coins it soon rose to 21s and 6d, and in 1695 was officially valued at 30s. An attempt to reform the silver coinage was without success, in 1699 the guinea was again reduced to 21s 6d, and in 1717 it was finally established at 21s.



Two casts of a guinea, obverse side bearing the head of Charles II.

During the 18th century a dual system of currency developed, and finally, in 1816, the currency was based entirely on gold. Since 1813 the sovereign (2016) has been the only gold coin, but I guinea = 2116 has persisted as a unit for certain payments, fees, moneyprizes, etc.

Ch. L.

Whale Fat

was an important item in the diet of the common people in France during Lent, as is shown by a street-cry of 1545. On the other hand "Conradi Gesneri medici Tigurini Historiae Animalium Liber V qui est de Piscium et Aquatilium animantium natura", one of the earliest manuals of zoology, dated 1558, states of whale blubber that it is used for candles and lamps, the flesh with the exception of the tongue being inedible. As one of the most important factors of whale-hunting Gesner mentions the use of the ribs for fencing and as door-frames. This would appear a somewhat meagre reward for such a dangerous occupation as whaling; it is therefore probable that the fat was also used as a cheap food.

To this day garden gates or door frames may be seen in the vicinity of Hamburg which are made of the ribs of whales, probably set up there by some captain in commemoration of his voyages to the Arctic Sea.

London House Signs

As was the case in all medieval cities the houses of London, especially inns and shops, had their signs. In 1672 it was forbidden to hang them out, as they frequently caused accidents in the narrow streets if they were not properly fixed. In 1773 the last signs, excepting those of inns, were removed, but the houses retained their old names for a long time afterwards. On the occasion of the coronation of King Edward VII, the business-houses of Lombard Street, the street of the banking and insurance companies, decided to hang out the old signs as a festive decoration. Seven of these signs, usually depicting animals, have been retained permanently.

Ch. L.

Pawnbroking

was first practised by the Lombards, money-changers from Lombardy. Three golden (originally blue) balls were the emblem of their profession. This sign is still seen in some Continental countries as well as in England to mark the premises of pawnbrokers and goldsmiths.

Ch. L.

The Importance of Rapid Transmission of News

for the modern exchange was appreciated by nobody more keenly than by the house of Rothschild. The family and business relations linking the Frankfort house with the branches in the various capitals of Europe resulted in each partner's being constantly informed of the economic situation abroad.

The first head of the English house, Nathan Mayer Rothschild (1777-1836), organized a carrier-pigeon service for the transmission of news. When after Napoleon's return from Elba the fate of Europe, both political and economic, hung in the balance, when the armies of the Emperor and of the allied powers were drawn up in the plains of Belgium for the final struggle, Roworth, an agent of the Rothschilds, waited at Ostende for the great news. He procured early information from the Dutch "Gazette", crossed the Channel, and on the morning of June 20th 1815, barely a day and a half after the battle of Waterloo, he brought the news of Napoleon's defeat to London. Rothschild immediately informed the Governmentthe family have always been loyal subjects of the countries of their adoption and the story is false that Rothschild made his own arrangements on the exchange before passing the news on. The Government, however, refused to believe the good news; readers of Thackeray's "Vanity Fair" (1848) will remember, how uncertain of themselves Napoleon's opponents felt. On the afternoon of the same day, however, Downing Street received confirmation of the news, and next morning Major Henry Percy (1785-1825), Wellington's adjutant, brought the despatch of the victorious general and the captured eagles of the vanquished army to England. Ch. L.

Nathan Mayer Rothschild. London, 1836.

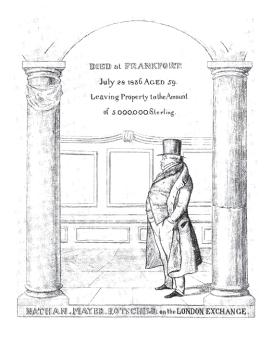


Table for Converting the Weights and Measures of the Principal Cities of Europe at the End of the 17th Century

Weights

100 lb. in	Paris	Rouen	Lyons	Marseilles	La Rochel and Nante	1	Toulouse and Languedoc	
Paris =	100	96,4	116,4	123,8	99	and the state of t	118	
London =	91,5	87,8	105,12	112,12	90		107,4	
Geneva =	112,6	105	130	135	108,12		129	
	London	Antwerp	Hamburg	Lisbon	Venice	Genoa	Naples	
Paris =	109,8	105	102	128	181,12	161,5	169,9	
London =	100	95,12	92,12	116,8	165,8	147	154,4	
Geneva =	123	118	115	143,8	201,8	181	188	

Long Measures

	Dutch	Flemish	Troy Ells	Cane-Ells (cannes)				
	Ells	Ells		in Provence, Avignon, Languedoc		Toulouse		Naples
100 ells (aunes) of Paris =	175	171 3/7	150	60		(66°/ ₃	53 ¹ / ₈
	Rods (English	verges) Seville	l Castilian	Bars Florenti fathom Venetian (brasses		s Spans		Constan-
100 ells (aunes) of Paris =	1284/7	141 3/17	140	187 1/2	204		480	180

After S. Ricard: "Le nouveau négociant, contenant les reductions toutes faites de Mesures, Poids et Monnaies de France" 1686.

The Word "Cotton"

in English writings before 1800 does not refer to cotton cloths, but usually to coarse, frieze-like cloths or garments. They were probably of wool. Thus "cotton and coarse yarns" mentioned in 1585 doutbless refers to woollen materials. In 1590 Manchester was said to outshine the neighbouring towns "by the glory of its woollen stuffs, which they call Manchester cottons". In early English records cotton is usually called cotton wool.

The word cotton is of Semitic origin. It made its way via Arabia into the languages of Europe; the Spanish word for cotton, algodón, still has the Arabic article.

Ch. L.

Change and Fortune

Fuller, the author of the "Worthies of England" (1662) links the word Change—in the sense of market —with "change" = "mutability", as significant for the varying fortunes of merchants and trade: "Because much of mutability is imported in the word Change, it may be a fit remembrance to merchants meeting there, not to build their hopes of perpetuity on what is so subject to vicissitudes and alteration. Well may this place be termed the change, where poor men so soon become rich by good successes, and rich men poor by loss and casualties unexpected." The same double meaning is contained in "Cambio", the Italian word for Exchange.

Coffee as a Medicine

In view of the drunkenness prevalent in England during the 16th and 17th centuries, the interest which coffee aroused when first introduced from the East was chiefly medicinal. William Harvey (1578–1677), the discoverer of the circulation of the blood, drank coffee long before it became a fashionable beverage through the influence of the coffeehouses. At his death he bequeathed to the College of Physicians 56 lb. of coffee to be drunk in his memory at the monthly meetings of the members.

A physician named Walter Rumsay was the first to ascribe medicinal properties to coffee, particularly as a remedy against drunkenness. At a later date Dr. Radcliffe, himself a great frequenter of coffeehouses, praised coffee as an almost universal remedy—stressing the fact that it must on no account be taken with milk.

In Walter Rumsay's book "Organon Salutis" (1657) his "friend and compatriote" J. Howell writes: "Touching coffee, I concurre with them in opinion, who hold it to be that black broth which was used of old in Lacedemon whereof the Poets sing." He also praises "the exsiccant quality it hath to dry up the crudities of the stomach, as also to comfort the Brain, to fortify the sight with its steem, and prevent Dropsies, Gouts, and Scurvie, together with the Spleen, and Hypochondriacall windes." Ch. L.

Sale by the Candle

was a form of auction common in the 18th century. The auction was announced on the Exchange. When prospective purchasers arrived at the appointed hour, a pin was stuck into a burning candle one inch below the wick. The highest bidder during the time required for the candle to burn down and the pin to drop, received the goods in question. The silence between bids and the fall of the pin gave rise to the saying that one "might have heard a pin drop". Ch. L.

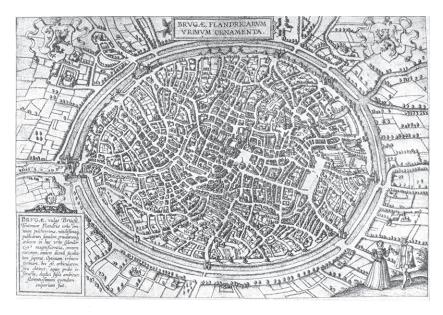
Price List of the Various Cotton Goods traded at the Amsterdam Bourse in 1719

Article	Price per lb. in deniers
Raw cotton from	
Cyprus	17-18
Accon	15-18
Smyrna	12-15
Curação	22-26
white Barbados	24-24
yellow Barbados	20-24
St. Thomas	22-26
Cotton threads from:	
Tutocorin	56-60
Java	27-42
Bengal	18-22
Surat	20-28
Fielebas	15-16
Aleppo	8-10
Jerusalem	12-13
Smyrna	8-12
	Ch. I

The Name Bourse

There is some doubt whether the term "bourse" originated at Bruges, where—above the meeting-place of the merchants—the arms of the van der Burse family were to be seen, consisting of three purses. It is more probable that the name of this family and the Bourse both go back to a late Latin word "bursa".

The "Steedebook van de Hartogdommen Brabant, Limburg en Lutsenburg" by Christoffel Beudeker (1718) says of the Bourse of Antwerp: "This place is called Janimedium (?), Forum mercatorum, or Basilica; it is however more frequently known as de Beurs." The Basilica was the Roman market, architectural developments of which are the Early Christian and the Romanesque churches. Ch. L.



Bruges, From the "Stedebook" of Christoffel Beudeker. 1718.