

THE ECONOMIC POLICY OF SOLON

REFERENCES to the sources from which the material used in this paper has been drawn will be found in three preliminary studies,—“ Trade between Greece and Egypt before Alexander the Great ” (*J.E.A.*, XXV, 1939, pp. 177-183), “ The early coinages of Athens and Euboea ” (*Num. Chr.*, I [6th series], 1941, pp. 8-16), and “ The chronology of Solon’s reforms ” (*Cl. Rev.*, LVII, 1943, pp. 1-3),—and they need not be repeated. Some notes have however been added on points which, as critics have suggested, require elucidation, and two considerations may be stated as postulates.

(a) There was no organised commercial system in European Greece at the beginning of the seventh century B.C.: overseas trading was a matter of individual enterprise, for which the states took no responsibility. A city might control trading within its own area, and, if it was situated on a commercial route, influence it in other districts by such means as duties: thus Pheidon could dictate terms to the merchants going to and from the interior of the Peloponnesus, since their best road passed through his territory. The dues could be modified to suit policy: the goods of one merchant could be charged prohibitive sums, those of another accorded easy terms: in the end the matter might often be settled by individual bargaining, much in the same way as in the Near East till quite recent years. There may have been some kind of understanding in the seventh century about spheres of activity, probably between the merchants rather than the states: thus the Corinthians and Chalcidians shared the trade with the West and North, in the latter with the Eretrians, while the Aeginetans had the bulk of that with the East and the Megarians operated in the North-East. Merchants who went outside their sphere were liable to be eliminated, but this was probably effected by commercial measures: for instance, the Eretrians seem to have been squeezed out of Corcyra by the Corinthians, but there is no record of any fighting between the two cities about this time. The cities, in fact, may have preferred to leave the merchants to their private enterprises: if they could be said to have had any policy, it could be described in the terms applied to that of Naples and Amalfi in the ninth century after Christ as the policy of merchants who lived by pillage as much as by regular trade.

(b) Before the middle of the seventh century, the evolution of coinage in Greek lands, including Asia Minor, had not gone further than what Aristotle treats as the first stage, in which a metal ingot was stamped with a trade-mark by its maker as a guarantee of quality: it passed from hand to hand at its commodity-value, which would be determined in each transaction where it was used by bargaining between the parties. Some primitive units of value had probably been represented by tokens:

for instance, the Greek drachma, a handful of spits, was almost certainly a token, accepted at a regular rate regardless of its commodity-value as iron: the Greeks never got quite so far as, for instance, the Chinese with their knife-money in representing an old cumbrous token by a miniature copy: the only example of this kind comes from the fringe of the Greek world in the tunny-fish shaped bronze of Olbia. But it may be taken as certain that the seventh-century Greek would have regarded handfuls of spits, and those only, as drachmas, until his rulers told him that a lump of silver with their mark upon it was a drachma; and then he would have accepted it on their instruction as a token.

1. According to the tradition derived by Plutarch from Aristotle, Solon was chosen as Archon at Athens for the double purpose of settling the quarrels between the rich and the poor inhabitants of Attica and of framing a new code of laws. This may have been a popular, if superficial, account current in Athens; but it scarcely does justice to the wide scope of his measures, which on the economic side involved a wholesale reorganisation of the industries of the country and city, and proved of far more lasting importance than the legislative changes which he introduced.

2. The condition of Athens and Attica at the end of the seventh century B.C. did indeed demand some drastic action on the part of their statesmen: a summary is given in the Cambridge Ancient History, which may be quoted here. "The general condition of the country remained backward. Its military power was barely equal to that of its tiny neighbour Megara. In general culture Athens lagged behind her Ionian kinsmen and her neighbours in Boeotia, Euboea, and Corinth. Athenian literature was still unborn and Athenian art rudimentary." In the financial and intellectual impoverishment of city and countryside alike, no leader had appeared who attempted to examine the causes of the distress and to suggest remedies: the sole idea that possessed the minds of those who fancied themselves more able than their fellows was to seize magisterial power and to use it for their own advantage—in Greek phrase, to make themselves tyrants. Each section of the community threw the blame for the chaos on everyone else, with the result that Athens had simply ceased to count in Greece, to use the term applied by the Delphic oracle to Megara.

3. How far Athens had counted in earlier times it is difficult to discover: there is not much material evidence to support the legends of the glories of Athens under the kings. But it seems probable that in the ninth century there was a fairly prosperous and self-sufficient agricultural population centering on Athens, though somewhat split up by the natural features of the country, and a certain amount of manufacturing industry for the supply of local needs, particularly in pottery. It is clear however that when the Greeks began to take an interest in other forms of activity than agriculture and to become more "sea-minded," as remarked by Thucydides, towards the end of

the eighth century B.C., Athens had no share in the movement for colonisation and trade overseas. The Chalcidians and the Corinthians established their posts in the West: Naxos in Sicily was founded in 735, and Syracuse in the next year; and during the succeeding half-century the eastern coast of Sicily and the southern of Italy were occupied by a string of Greek settlements. More important for its effect on the fortunes of Attica, during the same period Aegina was developing trade with Egypt. In the result, these three cities, Chalcis, Corinth, and Aegina, were in the seventh century certainly the most considerable manufacturing and shipping communities in European Greece till almost the end of the century: Athens, with these examples of prosperity on her borders, and with what would seem to be equal natural advantages, shewed no signs of a desire to share in their fortunes. There was apparently a strain of innate conservatism in the Athenian character.

4. The connexion of Aegina with Egypt was virtually a revival of a much older line of trade. In the flourishing days of the Minoan kingdom in Crete, there is evidence of the export of metal objects from Crete to Egypt; and, though there is no similar evidence with regard to the nature of the return shipments, there can be little doubt as to what they were. Crete then contained a large urban population, for which it would have been impossible to grow sufficient corn in the island; Sir Arthur Evans estimated the inhabitants of Cnossus alone at about 100,000. The obvious source of supply to meet the needs of the cities in this respect was Egypt, always in ancient history a great exporter of corn, and of little else. On the other hand, the Egyptians had no supplies of silver in their own country and not only imported it eagerly—the records of the offerings in Egyptian temples show vast quantities of silver—but rated it at a comparatively high price, half the value of gold. It can therefore be concluded with probability that the Minoans imported corn to feed their cities from Egypt, and in return sent silver, which they could obtain readily, during the period when they commanded the seas, from the islands of the Aegaeon. It is not clear whether the rulers of the Mycenaean age on the mainland of Greece carried on a similar trade with Egypt, though they certainly had some dealings overseas: probably they were not under the same necessity of importing corn as the Cretans had been. But when the Greek refugees from the Dorian invasion settled on the west coast of Asia Minor and developed important manufacturing centres there, they went to Egypt for the same reason as the Cretans had done: the land in their vicinity was pastoral rather than arable, so they turned to Egypt for their supplies of corn.

5. When the Aeginetans embarked on their maritime trade, it would not take them long to discover the possibilities that lay in the exploitation of the Egyptian market. The way had been opened for them by the Ionian cities, with which the associations of the Aeginetans were certainly close and long: when the town of Naucratis was organised as the emporium for Greek business with Egypt, the cities

to which precincts were assigned were eleven on the Asiatic side of the Aegaeon and Aegina alone on the western. They could probably compete with the Ionians on favourable terms: assuming that the chief article which they took to Egypt was silver,—and there is no trace of any other Greek product in Egypt, outside Naucratis, at this period, nor was there any that would have been likely to appeal to the Egyptians,—Aegina had sources of silver close at hand, notably at Siphnos, while the Ionians would have to get the metal either from Thrace or from the interior of Asia Minor. In the first instance the Aeginetans may have sought a supply of corn to meet their own needs: it would certainly have been impossible for their small island to feed a busy seaport town, and, though Attica might have been able to export enough in an average year, Attic harvests were uncertain. In any case, corn could certainly be bought more cheaply in Egypt than at Athens; and when once the Aeginetans had realised the fact that the purchasing power of silver was far more in Egypt than in Greece, it is inconceivable that they would not bring over all the cargoes of corn that they could carry and flood the Greek markets with cheap corn. It is not surprising that the record for shipping profits in the Greek world was, according to Herodotus, easily held by Sostratus the Aeginetan.

6. It seems clear that such a development on the part of the Aeginetans would hit the Attic farmers hard: the legislation of Solon, which forbade the export from Attica of any kind of agricultural produce other than olive oil, indicates that they had been accustomed to sell their produce abroad, whether to Aegina or elsewhere. But now they would not only be deprived of their nearest outside market, but would also be likely to be undersold in the corn-market of Athens itself by the Aeginetans, and certainly in other Greek cities, even if they prohibited the import of corn from Aegina to Athens as a means of protection. A further difficulty possibly lay in the fact that there had been a rise in the standard of living amongst the upper classes at Athens during the second half of the seventh century, as was not unnatural; men who were possessed of some property saw their neighbours in the trading cities, such as Corinth, enjoying luxuries which were unknown in Athens, and sought for means of following their example. But the only source from which they could draw additional income was the land: there is no evidence that any manufactures of importance existed at Athens at this period, and all accounts agree in representing the strength of the so-called oligarchical party—that is, the wealthier classes—as derived from the plain-dwellers, that is, the landed proprietors of the agricultural districts of Attica. According to the tradition handed down by Aristotle, the customary rent paid by tenant cultivators of such estates was one-sixth of the produce: so the only legitimate way in which the revenues of the landlords could be increased, in the face of falling prices for corn, was by making a drive for higher productivity, which in a primitive stage of agriculture almost certainly means steady impoverishment of the land: if this failed, harsher forms of exaction were likely to be employed. The position of holders

who farmed their own lands would be even worse: if they could not sell their produce at profitable prices, any reserve of capital which they might hold would soon disappear, and they would be forced to have recourse to money-lenders to keep their farms going, with the inevitable result that they would get deeper and deeper into debt. First they pledged their lands, and then their children or themselves, and in the end were reduced to slavery and in some cases sold to foreign countries: such is the picture drawn by Plutarch.

7. The last item in this account suggests that it was not the Athenian large owners who were the most serious offenders in the matter. It may indeed be doubted whether they would, as a rule, have possessed any spare capital to lend out, in view of the fact that their incomes would almost certainly be diminishing; and, if they had, landed property in Attica would not have been a particularly desirable form of security in which to invest their money. Moreover, if they had taken up mortgages on land and foreclosed, they would not have wanted to drive the cultivators off the farms: the land would be no use to them except for farming purposes, and, though they might seek to keep the old cultivators as serfs, they would certainly not sell them into foreign countries. It is more probable that the loans were derived from some source outside Attica, from capitalists who were not interested in maintaining the agricultural output of the land over which they had secured a hold, but rather preferred to sink their money in crippling a possible competitor; and, if this were the case, that source can hardly have been other than Aegina.

8. The problem would not be made easier, from the point of view of the Attic farmers, by the fact that they had to grapple with a novel form of reckoning values, due to the introduction of coined money; and here again Aegina was the centre of disturbance: for the greater part of the seventh century, Aeginetan coinage had dominated the currency of Greek trade west of the Aegaeon. At an earlier date, the general measure of exchange had been a handful of six iron rods, known by the name of a drachma: this was a token only, and the intrinsic value of the metal in the individual rods did not determine their purchasing power, as is evident from the fact that the weights of the specimens which have been preserved are very variable, though the rods approximate to the same—presumably the most convenient—shape: like cowries or other primitive currency, the rods would simply be counted out from hand to hand when required for the settlement of a bargain. On the east of the Aegaeon, the unit of exchange had been in a different form: there it was an ingot of native gold and silver alloy, known as a stater, which was stamped by the maker with a distinguishing mark as a guarantee of quality, so becoming a coin: it appears, however, from the irregularity of the weights of the staters that there was no idea of a standard at this period. It was probably about 700 B.C. that the Aeginetans, who had doubtless seen the Ionian staters handled in trade, followed the lead and struck

ingots of silver, which they marked with the badge of their city, a turtle, thus initiating coinage in Greece. Then, a few years later, possibly about 670, Pheidon the ruler of Argos conceived the idea of standardising the weights and measures of the districts he controlled commercially, which included most of the Peloponnesus outside Laconia; and in connexion with this plan he utilized the Aeginetan silver ingots to supersede the old iron rods as currency: he ordained that the silver stater should be accepted as the equivalent of two bundles of rods—two dráchmas—thus making the ingot of bullion into a token with a denomination in specie which was fixed wherever his authority and credit were dominant in trade.

9. It may be presumed that this valuation of the stater was determined in relation to the price of silver bullion in the metal market at Aegina, as the Aeginetans appear at this time to have held a virtual monopoly of the maritime trade of the Aegaeon, and so were in a position to control the price of the metal which came from the islands, the nearest source of supply: this was doubtless the reason why Pheidon entered into his partnership with them and had the coins he required struck at Aegina. It is not needful to suppose that the metal value of the stater was the same as its face value; an agio for the costs of mintage would certainly be allowed: but the difference would not be great, if the change-over from the old to the new form of currency was well planned, since the purchasing power of the staters would change from specie to bullion as soon as they passed outside the area where trade was dominated by the treasury of Pheidon or the ships of his partners, and any considerable difference would have risked a dislocation in the acceptance of the novel currency. But the advantages which accrued to the issuers of coins at Aegina from the measures of Pheidon must have been speedily appreciated by the merchants of other cities; and, while the Aeginetans might be able to hinder the use of their silver for recoinage on a different standard by outsiders or the circulation of other coins in their trading preserves, if another city could secure a supply of silver from a source outside Aeginetan control and use it in an area where the Aeginetans could not compete on equal terms, it could embark on the same lucrative business. Chalcis and Corinth were both in such a position: they were in touch with the silver-producing districts of Paeonia in the North, and could get there without any fear of commercial interference from Aegina; and their further trading connexions were in the main with Italy and Sicily, from which Aegina was cut off, in a maritime sense, by the difficulties of maintaining a constant traffic round the south of the Peloponnesus. So within a few years of the Pheidonian reform, probably by 625, both these cities were issuing silver coinages stamped with their own badges on a standard which gave a much smaller amount of silver to the drachma than the Aeginetan. The explanation of the difference in standard is to be found in the areas of circulation of the coins, and need not be discussed here: the important point, as will appear, is that although a Corinthian drachma weighed only about half as much as an Aeginetan, it was still a drachma in specie, and in a market where both

currencies were recognised would have the same purchasing power as the heavier coin, or as the old bundle of six iron rods: all alike were tokens. This was a material factor in the economic policy of Solon.

10. Pheidon by his "reform" had initiated state-controlled currency in the Greek world, and so had unwittingly saddled trade with the problem of foreign exchange which has continued to trouble it ever since. It is a problem to be tackled by expert financiers, and the Attic farmers of the seventh century B.C. must have been hopelessly out of their depth. There were, however, some more enterprising Athenians who apparently tried to mend their fortunes by embarking on trade; amongst these was Solon himself, though what the precise nature of his mercantile activities was is not recorded. But isolated enterprise was not sufficient to rescue the community from its difficulties: a common policy was needed, and this was barred by internal dissensions. The country was split up between agriculturists and traders, and there was a serious clash between them when Cylon, a wealthy and ambitious aristocrat, attempted to establish himself as tyrant and seized the Acropolis at Athens: his attempt was crushed by Megacles, the archon of the year, who was a member of the family of the Alcmaeonidae, in later times the Athenian family most continually identified with business interests. But, though Megacles had rallied enough help, including seemingly the small farmers and labourers, to enable him to defeat Cylon, he could not hold his supporters together: the ruthless way in which he treated his opponents roused so much popular feeling against him that the whole Alcmaeonid family was expelled from the country, and for generations afterwards was regarded as under a curse. The factions revived, and the quarrels of rich and poor were intensified, till Solon was chosen as archon in the hope that he would be able to find some solution of the problems that were creating political chaos at Athens.

11. It is evident that he recognised at once that the root of the difficulty was economic: Attica had been a self-sufficient agricultural community with a margin of production for export until unlimited supplies of foreign corn began to be landed and marketed at an island within sight of Athens and sold at a price with which the Attic farmers could not possibly compete. If agriculture in any form was to survive in Attica,—and it must be remembered that up till this time the income not only of the farmers but of the landowners of Attica, and so of the greater part of the population, had been derived from agricultural produce,—it was essential that the growing of corn should be abandoned in favour of some form of cultivation which would not be so susceptible to foreign competition. In view of this, it is noteworthy that in the first law of Solon—if not the first to be promulgated, at any rate one which stood on the first of the axones on which the laws were inscribed—was a provision which forbade the export of any produce other than olive oil, under severe penalties. It does not appear that there was any limitation imposed on the cultivation of produce for

the home market at Athens, and Solon may well have foreseen an increase in the demand there if the measures, which will be described later, for the development of new industries were successful; but the Attic farmers were not to be tempted into an export trade which could not possibly pay. In the first place, however, there was the existing burden of debt to be faced; and the problem of dealing with this was complicated by the fact that the changes in the objects of Attic agriculture, more particularly the encouragement of olive-husbandry, which were contemplated by Solon involved the need for more capital: the growth of the olive-tree to productive maturity is slow. This made the financial side of the operation one which required careful handling, since a wholesale cancelling of debts would have spoilt the credit of Athens in the Greek money-market, and would thus have made it difficult to raise fresh capital. It is not likely that there would be any fluid cash in Athens itself at this time, if the accounts given by historians of the local financial situation are correct: the only sources to which Solon could look for assistance were the trading centres, Aegina, Corinth, and Chalcis, and the great temples, all of which would require to be satisfied with the security for an advance. Solon therefore did not repudiate the bonds on which money had been borrowed: he did forbid the seizure of the person of a creditor or of members of his family for debt—which is a normal step in the development of personal rights—and he also took measures to prevent the alienation of land, though what the exact nature of these was is nowhere recorded: he may have given some form of state guarantee for the capital sum. The key to the famous *Seisachtheia*, the removal of burdens, is summarily and lucidly stated by Androtion, the sole ancient chronicler who shows a grasp of economic principles: it consisted not in the cancelling of debts, but in lowering the rate of interest; and this was effected by paying the interest in the same number of drachmas, but in drachmas of less weight.

12. The words of Androtion have been curiously misunderstood, and he has been accused of a failure to interpret the situation which should rather be attributed to his critics: his account is quite straightforward and intelligible if it is remembered that the drachma was still legally nothing but a term of account, and that the coins used in Greek trade had, after the measures of Pheidon, only a conventional value as currency. In fact, it would probably have been in order to make the payment of a sum expressed in terms of drachmas by means of the old handfuls of iron rods in any market where they had not been demonetized, as they had been in the Peloponnesus. It might of course have been difficult to procure them, as Pheidon seems to have taken steps to withdraw them from circulation; but that they were still current in some quarters after his reform is indicated by the story that Rhodopis dedicated an offering of them at Delphi; and they were in all probability the iron currency which was in use at Sparta down to the fourth century. As already mentioned, the silver coins issued by different states and accounted by them as drachmas varied considerably in metal content; the Aeginetans struck a stater weighing about 180 grains which passed

for two drachmas in their markets, while the Chalcidians and the Corinthians had one weighing about 130 grains which passed for two drachmas at Chalcis and for three at Corinth. If an Attic farmer had raised a loan and received the cash in Aeginetan drachmas, and the bond had not been specifically stated to be for drachmas of a particular standard, it would presumably have been quite legal for him to pay the interest or repay the principal in Chalcidian or Corinthian drachmas of less weight, just as it was legal for the French nation a few years ago to pay the interest on loans raised in francs before 1914 by means of francs of one-fifth the value of the old on the gold standard. At a later date in the history of Greek finance, the currency to be used was commonly expressed in contracts, and at centres where diverse currencies came into the market ratios of value as between one and another were drawn up; but it is not likely that the importance of such provisions would have been realised in the seventh century, when state standards of coinage were a novelty. Solon may well have been the first financial expert to perceive how foreign exchange could be exploited.

13. In order to carry out such a scheme, it was necessary for Solon to secure the position of the lighter drachmas in the Athenian market, by entering into commercial relations with the cities which issued them, which meant a diversion of trade-routes. The natural highway for the export of goods by sea from Athens is down the Saronic gulf; and for at least a century this line of traffic had been under the control of Aegina: such external trade as Athens had acquired must in the main have been carried in Aeginetan ships and valued in terms of Aeginetan currency, and the drachma of the Athenian money-changer would be the Aeginetan turtle-type: its value was not, it is true, guaranteed by Athens, but the guarantor state was within sight, and so long as there was a regular flow of trade between the two cities concerned there was no risk of the coins losing their nominal value. But if Athenian trade could be transferred from the merchants of Aegina to those of Corinth or Chalcis, there would be a supply of the coinage of those cities in the Athenian markets which would have just as good a backing for circulation as the coins of Aegina; and there would be the further advantage that then Athenian produce sold overseas would, when the prices obtained for it were reduced to terms of silver, be accounted at Corinth as worth about twice as many drachmas, or at Chalcis as about one and a half times as many, as at Aegina. To link up communications with Corinth would have been rather difficult when Solon started his reforms, since Aegina was in a strategic position to stop the passage of ships, and Megara, an ally of Aegina, could block the way by land: it would have eased matters if Athens could have secured possession of the island of Salamis, which would have sheltered a good part of the sea-route from Aeginetan interference: this island had been a bone of contention between Athens and Megara for a long time, but it was not until a later stage in his operations that Solon finally succeeded in evicting the Megarians from it. Chalcis, however, presented less difficulty: the northeast coast of Attica is separated from Euboea only by a narrow strait,

and trade between Athens and Euboea could easily be maintained without much risk of interruption from Aegina. So, in the first instance, Solon joined the Euboean trade-group.

14. The most direct evidence of this action on his part is furnished by coin-finds. Towards the end of the seventh century B.C. a plentiful coinage of silver staters and fractions on the Euboean system of weight made its appearance: the coins bear a variety of types, but may certainly be ascribed to a single mint or workshop, because pieces with different obverse-types are found struck with the same reverse-punches. The great majority of these coins have as their distinguishing type either the wheel, which was well known as the city-badge of Chalcis, or the gorgoneion, which was used by several cities, amongst them Eretria: other types are represented by fewer examples. There can be little doubt that all these coins were struck at a central mint to serve as a common currency, a procedure for which there are several instances in Greek numismatic history; and it would be natural to find that mint at Chalcis, one of the three great metal-working cities in this period, the other two of which also had their own mints and probably struck coins for other cities as well, very much as the London and other modern mints do. (Barclay Head was probably right in ascribing the rarer types of this series to the smaller cities of Euboea and Attica.) In any case, it is certain that this coinage circulated freely in Attica, since numerous specimens have been found there, sometimes associated in hoards with another issue of Eretria; and Solon's entry into the group seems to have been signalled by the issue from this same mint of coins with the badge of Athens, the owl. Coins of the owl-type are rare; but, as the chief object of their issue would be to advertise the fact that coins of this standard were now to be the official currency of Athens, a comparatively small number would serve this purpose. Their date is fixed as approximately that of the Solonian reforms by the fact that they are demonstrably contemporary with the coins of the gorgoneion type, which come in the later part of the general series; and a gorgoneion coin has been found which is overstruck with a Corinthian type which is considered to have gone out of use about 585.

15. The legalisation of the Euboean standard for currency in Attica is described by ancient authorities by the statement that Solon made weights related to the coinage and divided the mina into 100 drachmas. Up till this time, there had apparently been no interrelation between the commercial weight-system, based on the mina, and the units of coinage; Pheidon is said to have introduced weights, created standards, and issued silver coins with fixed currency values; but there is no suggestion that the coins were struck on a standard designed to link up conveniently with the regular weights of commerce: the fact that the Aeginetan drachmas averaged about 70 to the mina seems to indicate that this was not the case. It was Solon who first made the drachma into a weight instead of a term of value, and at the same time linked his coinage and

commercial weights; he did not give his drachma-coin the full weight assigned to the new commercial drachma, but not unnaturally allowed an agio to cover the expenses of mintage, so that silver bullion weighing a mina was coined into 105, not 100, drachma-pieces. From a commercial standpoint, the effect of this change would certainly be far-reaching: for the first time, the silver-merchant could dispense with the use of scales, and know that if he counted out 105 silver Athenian drachmas he had a mina's weight of silver, with the guarantee of the Athenian state for its content and its purity. The importance attaching to this guarantee was evidently realised at Athens, as appears from the exactness with which both weight and purity were maintained for some centuries: analysis of Athenian coins has proved that the metal is of a fineness unequalled by any contemporary coinage except the Persian royal shekels, and the weights hardly ever vary by so much as 1% from the norm. This would naturally make the Athenian silver more attractive in the foreign markets, and it may reasonably be supposed that this was one of the advantages foreseen by Solon as likely to accrue from his reform of the coinage: the first object which he had before him was the relief of the burden of debt, but he had a wider outlook and did not restrict his plans to this alone.

16. While this change-over was an integral part of the schemes of Solon for the economic reconstruction of Athens, it was probably not carried out in full at the outset of his reforms: all that was necessary from a legal standpoint, in order to secure the benefit to debtors of the use of the lighter Euboean drachma, was to have it formally adopted as the standard of Athenian currency; and this was doubtless arranged in the general legislation which Aristotle mentions in the same breath with the reduction of debts, and which he specifically states was before the introduction of the new weights and measures. What interval elapsed between these steps in the reforms does not appear in Aristotle's account, but from other sources there is reason to suppose that it was of some years. At any rate, the story runs that after his legislation had been carried, Solon went abroad for a period of about ten years: the reasons for this action are variously given by different writers, and there may be truth in the suggestion that he wanted to escape from constant requests, criticisms, and complaints, and hoped that, in Plutarch's words, in this time the people would become accustomed to the laws. But a more substantial objective can be discerned from Aristotle's statement that he went for trade and observation: in other words, he went on a commercial tour.

17. Solon had been a merchant before he became a legislator; and he could hardly have failed to realise that, if Athens was to take a leading place in the Greek commercial world, something more was necessary than to rehabilitate the agriculture of Attica. Olive oil might be a lucrative export, but that would benefit directly few except the farmers and landowners: increased production of corn and vegetables for

the home market would be of little use without an industrial population which would require to be fed and be able to pay for their food. The exportable manufactures of Athens in the seventh century were, to all appearance, negligible; and the geographical position of the city gave no advantages over other cities as a centre of distribution of goods produced elsewhere. To capture trade, it was imperative to find out for what forms of merchandise there was a demand in foreign markets, and how far Athens could be equipped to supply them at a profitable rate. He had taken steps to encourage the settlement in Athens of skilled workers who had definite trades, as a first stage in the development of industries; but this would not be enough, unless those trades could in some way exploit the natural wealth of Attica, and find in the country itself the capital to enable them to compete with other states. For instance, it would have been futile to attempt to rival the merchants of Ionia in textile manufactures by importing the raw materials from a distance and making them up in Athens, unless a local product of sufficient value could be found to pay for these raw materials at an advantageous rate. There was abundant ground for Solon's commercial tour. And it is noteworthy that he went to the East, not to the West; the markets of Italy and Sicily had for a long time been supplied with Greek goods by the Corinthians and Chalcidians, and the relations with these two cities which Solon had cultivated, as described already, would enable him to obtain any information he wanted about possible openings for Athenian products in the West and to arrange for the shipment of goods. As a matter of fact, there had apparently been some export of Attic pottery to Italy before the end of the seventh century, which must have gone through Corinth or Chalcis; and there was certainly a great increase in this export in the sixth century, coincidentally with the development of the black-figured technique at Athens, which probably owed something to Corinthian influences. But Greek trade with the East had been monopolised by the Aeginetan merchants and their allies, so far as European Greece was concerned; and it was here, particularly with Egypt, that Solon saw a chance of competition. So to Egypt he went, and probably spent a good part of his ten years there.

18. Solon may not have had much information about the conditions governing the trade between Greece and Egypt before he started on his tour of enquiry; the Aeginetans, naturally, would keep all the details as secret as possible, and there is no record of any Athenian visitor to Egypt before Solon. When he got there, however, he would soon learn that what the Egyptians wanted most avidly in return for their corn was silver, and that there was no great demand for manufactured articles of any kind. This gave him the opening he wanted: Attica could produce silver, and, as it proved,—though Solon may not have realised the strength of his position in full,—could produce it as advantageously as any Greek state. It is not certain when the silver-mines at Laurium in the south of Attica were first worked: according to a late fifth-century writer, they had been in operation from time immemorial, but this

may refer to surface pittings only: still, these would reveal the presence of the metal and furnish Solon with a clue. At any rate, it is clear that soon after Solon's return to Athens a regular silver coinage of distinctively Athenian types was initiated, and tradition ascribed this to Solon and treated it as part of his reforms.

19. That this coinage was designed with a view to its export abroad, and particularly to the East, may be conjectured from the account of it given by Aristotle, in which he states that Solon increased the *nomisma*—that is, the unit of currency to which a legal value was attached—which had formerly been a didrachm, and made it larger than the Pheidonian. As shewn previously, the *nomisma* which was first adopted by Solon to help in the diminution of debts was the Euboean didrachm of about 130 grains weight: this he increased by substituting for it a tetradrachm. The Euboean *nomisma* was much lighter than the Aeginetan, a didrachm of about 180 grains, which was the *nomisma* called by Aristotle the Pheidonian; and the *nomisma* larger than the Pheidonian which Aristotle had in view can be no other than the tetradrachm weighing about 270 grains, with the types of the head of Athena on the obverse and her owl on the reverse, which with only slight modifications remained the Athenian *nomisma* for five centuries. Head dated the introduction of this coin at about 566 B.C., a date which accords well enough with the chronology of Solon's reforms: if he set to work on the reorganisation of the coinage soon after his return to Athens, it would not be surprising to find that he had to spend some years in developing the mines and creating a mint before the first of his tetradrachms were issued. But the significant point in the change, having regard to the requirements of trade with Egypt, is that Solon should have made this *nomisma* heavier than its chief competitor: there would have been no advantage in this for the Greek markets, because the Greeks had no fondness for heavy coins, especially as local currency: the lists of coins found on any Greek city site show a marked preponderance of small pieces, and tetradrachms are much more frequently found at some distance from their place of origin than at home, if commercial hoards are left out of account. The merchants of the East, on the other hand, seem to have preferred a substantial lump of metal, then as now; and Solon had realised this preference in the course of his enquiries in Egypt.

20. The results of this reform were far-reaching: it secured a market on favourable terms for the output of the silver-mines of Attica, and, until those mines were exhausted, about the end of the first century B.C., silver evidently remained a mainstay of the prosperity of Athens. The extent of the influence exercised by the Athenian owls, as the tetradrachms were popularly styled, is shown not only by the finds of them which have been made in all parts of the Near East, but by the way in which their types were copied as far afield as Central Asia and Southern Arabia; in Arabia, indeed, until the first century B.C., an owl seems to have been regarded as

an essential part of the types of a silver coin, thus witnessing to an even longer period of popularity than has yet been attained by the thalers of Maria Theresa in the same region. The tetradrachms must have got out to the Near East almost as soon as they were issued, since the earliest coins of Cyrene, which can hardly be dated later than 550, were struck on them; and before the middle of the next century they practically monopolised the export trade in silver from Greece to Egypt: the earlier hoards of Greek silver coins found in Lower Egypt consist of miscellaneous collections from all round the Aegaeon; but after the Persian wars there are hardly any large pieces of Greek mintage except the Athenian tetradrachms, and the only issues that vied with them are from the Persian Empire, especially from Tyre and Sidon. Solon had clearly discovered how to win a very profitable substitute for corn from the soil of Attica.

21. The profits to the state would accrue, not only from the export of silver to foreign markets, but from its use at home as a medium of exchange: the Athenian tetradrachm served a double purpose, as an ingot of bullion and as a token-coin for local currency. The mines were the property of the state, so that the mint would be able to protect itself against variations in the price of silver, and to some extent to dictate the international valuation of the metal. It is fairly certain that the Athenian drachma did not contain a drachma's worth of silver, even if allowance is made for the *agio* on coinage for which provision was made in Solon's legislation: as has been mentioned, the Aeginetan stater was originally struck as an ingot, and when it was given a denomination, this was probably fixed at something near its metal value: so it is most likely that the Aeginetan coinage gives a better guide to the price of silver in the Greek market about 600 B.C. than the Athenian. It can hardly be supposed that there would be much difference in the price of silver as between Aegina and Athens, assuming a free market; so, if the Aeginetan coins had a metal content approximating to their face value, the Athenian, struck on a standard of weight only about two-thirds of the Aeginetan, must have been worth much less locally as bullion than as currency.

22. That this was the case is suggested by an episode recorded in a work on Economics from the school of Aristotle, which tells how the tyrant Hippias demonetised the Athenian tetradrachm and called in the coinage at a fixed price: then, when everyone expected a recoinage on a new basis, he simply reissued the old coins at the old valuation. In other words, Hippias abrogated the law of Solon by which the tetradrachm circulated at a face value above its metal value, and bought up the coins at bullion price: then he reissued them as tetradrachms as before, doubtless with the backing of a new decree, and so made a profit of perhaps fifty per cent on the transaction. Another application of the same principle may be found in a decree promulgated when the Athenian Empire was at the height of its power, which required that all silver coins coming into the Empire should be handed over to the authorities

at the point of entry and exchanged for Athenian currency: since many of these coins would be on a standard heavier than the Athenian, this meant that the authorities would give a light drachma in exchange for a heavy one: in the Empire, of course, the purchasing power of both would be the same, but the extra metal in the confiscated coin would go to the profit of the Athenian state.

23. If the reforms of Solon are regarded as a whole in their relation to the later history of Athens, it may fairly be held that his most important contribution to the welfare of his country on the economic side was the development of the silver trade. Politically of course the *Seisachtheia* stands out, as a first move towards the establishment of a complete democracy at Athens; but in itself this could have contributed little to the wealth of the city. The measures by which it was accomplished, in the transfer of commercial relations to a new group, though a necessary part of the programme, were only of temporary value till the change-over had been completed. The introduction of new industries and the importation of skilled workers from abroad do not seem to have resulted in any large increase in the export of goods manufactured locally, other than pottery, and that rather as a luxury article. It was the silver trade that made Athens into a commercial and shipping centre, and it was the discernment by Solon of the potentialities which lay in this use of the natural resources of Attica that led to the greatness of Athens in the fifth century. Athens could not maintain the leadership of Greece, because Athenian politicians, from Cleisthenes onwards, had no conception of the true nature of a democratic Empire, and, instead of admitting the allies to an equal status of benefit, exploited them for the enrichment of a comparatively small circle of Athenian citizens: this was hardly implicit in the policy of Solon. Still, it may be said that, though the Seven Wise Men of Greece were all, so far as records show, men with a flair for business, none did more for future generations of his countrymen than Solon.

NOTES

§2. The summary in the *C.A.H.* has been criticised as too sweeping: but it must be remembered that it is a general one. There were no doubt exceptions: as will be seen later, some manufactures, some art, and some commerce existed, besides the chief occupation of the country, agriculture. But whatever there was in the nature of industrial enterprise seems to have been due to individual efforts to escape from the net of agricultural depression, and there is no trace of the pursuit of a definite economic policy either by the rulers or by any organised body.

§3. The fact that no Athenian colonies were founded before the last years of the seventh century does not mean that no Athenians went abroad as colonists: it is quite likely that would-be emigrants joined the parties which were made up by other cities. The early Greek colonies were not outposts of the mother-cities planted for aggressive purposes, much less civilising missions: they were factories for trading convenience, and such military importance as they possessed consisted in their position as guards of the trade-routes, like the early European factories on the coasts of India.

In some cases it is recorded that the promoters of a colony invited settlers to come from other cities than their own, and it is probable that the motive for this was to secure expert assistance in the development of some trade or industry in the colony, as, for instance, when the Chalcidians took with them to Sicily vine-growers from the island of Naxos. The idea of infiltration as a means of empire does not seem to have penetrated the Greek mind till colonisation had been in progress for two centuries.

§ 9. The statement of Ephorus that Pheidon struck coins at Aegina has given rise to a great deal of unnecessary argument, the main objection being that Aegina was not in Pheidon's dominions. There was no reason then, any more than there is today, why a city or a ruler who wished to issue coins should not order them from any maker he chose, either in his own dominions or outside: a score of foreign countries have had coins struck at the London mint in recent years. There are several series of coins of seventh century date which appear from their fabric to have been struck either at Aegina or by Aeginetan workmen, and which bear different types and were therefore presumably issued by different authorities. None of these has any legend, and only a minority of the types can be assigned to their owners: it is likely enough that one of the unidentified types is that of Pheidon.

§ 11. The exact nature of the measures by

which Solon "freed" the land of Attica is by no means clear. The removal of the Horoi, which were presumably mere-stones, suggests something like the abolition of enclosures and the restoration of communal rights upon which there had been encroachments: but this implies a system of tenure for which there is no authority in Greece. In any case, it belongs to the legal rather than to the economic side of Solon's reforms.

§ 13. The contest between Athens and Megara for the possession of the island of Salamis was probably a long drawn out one, and it may have changed hands more than once. If Sigeum was occupied by the Athenians about 600, as is usually accepted, the war may have begun some time previously, as such a move to intercept Megarian trade with the Euxine is not likely to have been an opening one: on the other hand, if Herodotus is right in ascribing to Pisistratus a leading part in the capture of Nisaea, this is not likely to have taken place much before 590. The fact that the Aeginetans do not seem to have done anything to assist the Megarians, who were to some extent at any rate their commercial allies, rather emphasizes the likelihood that the point at issue between Athens and Megara was facility of trade between Athens and Corinth: what Athens wanted was to be able to send goods to Corinth cheaply, and, as the ultimate destination of those goods was the West, outside Aegina's sphere of trade, the Aeginetans did not feel keenly interested.