

WHAT INDUSTRIES ARE WORTH HAVING

BY F. W. TAUSSIG

THE title of this paper puts in familiar terms a question which economists state in more technical phraseology. They speak of the principle of comparative cost, and of the relative advantage to a country from prosecuting one or another industry. The doctrine of comparative cost has underlain almost the entire discussion of international trade by English writers. It has received singularly little attention from the economists of the Continent, and sometimes has been discussed by them as one of those subtleties of the old school that have little bearing on the facts of industry. I believe that it has not only theoretical consistency, but direct application to the facts; and that in particular it is indispensable for explaining the international trade of the United States, and the working of our customs policy. Neither the familiar arguments heard in our tariff controversy nor the course of our industrial history can be understood unless this principle is grasped and kept steadily in view.

Briefly stated, the doctrine is that a country tends under conditions of freedom to devote its labor and capital to those industries in which they work to greatest effect. Hence it will be unprofitable to turn to industries in which, although labor and capital may be employed with effect, they are applied with less effect than in the more advantageous industries. The principle is simple enough; nor is it applicable solely to international trade. It bears on the division of labor between indi-

viduals as well as on that between nations. The lawyer finds it advantageous to turn over to his clerk work which he could do as well as the clerk, or better, confining himself to those tasks of the profession for which he has, by training or inborn gift, the greatest capacity. The business leader delegates to foremen and superintendents routine work of administration which he doubtless could do better than they; he reserves himself for the larger problems of business management for which he has special aptitude. The skilled mechanic has a helper to whom he delegates the simpler parts of his work, giving his own attention to those more difficult parts in which he has marked superiority.

It is in international trade, however, that the principle, if not most important, needs most attention; because it is obscured by the persistence of prejudice and shallow reasoning in this part of the field of economics. It is closely related to the problems concerning the varying range of wages and prices in different countries. There is perhaps no topic in economics on which there is more confusion of thought than this; and although fallacies of much the same sort are prevalent in all countries, it is in the United States, above all, that there is need of making clear the relation between the rate of wages and the conditions of international trade.

Whatever may be the differences of opinion among economists on the theory of wages, — and those differences

are less in reality than in appearance, — there is agreement that a high general rate of wages rests upon general high product, that is, on high effectiveness of industry. It is agreed that high general wages and a high degree of material prosperity can result only from the productive application of labor; good tools or good natural resources, or both, being indispensable to high productivity. And when 'labor' is spoken of, not only manual labor is meant, but the equally important labor of organization and direction. In the United States particularly, the general effectiveness of labor depends in great degree on the work of the industrial leaders.

Now, when once there prevails a high range of wages, due to generally productive application of labor, this high rate comes to be considered a difficulty, an obstacle. The business point of view is commonly taken in these matters, not only by the business men themselves, but by the rest of the community. To have to pay high wages is a discouraging thing to the employer; does it not obviously make expenses large, and competition difficult? People do not reflect that if wages are high, and steadily remain high, there must be something to pay them from. High wages, once established, are taken, in a country like the United States, as part of the inevitable order of things. The ordinary man regards them simply as something which he must face, and too often as something that constitutes a drawback in industry.

The important thing, of course, is that wages should be high not merely in terms of money, but in commodities — 'real' wages as distinguished from money wages. Of money wages more will be said presently. High real wages, to speak for the moment with reference to these, cannot possibly be paid by employers generally unless the

workmen generally (as guided by the employers and aided by tools and machines) turn out a large product. In current discussions of the tariff and wages, it has often been alleged that in one industry or another the skill or effectiveness of the workmen is no greater in the United States than in England or Germany; that the tools and machines are no better, the raw materials no cheaper. How, then, it is asked, can the Americans get higher wages unless protected against the competition of the Europeans? But, it may be asked in turn, suppose *all* the Americans were not a whit more skillful and productive than the Europeans; suppose the plane of industrial effectiveness to be precisely the same in the countries compared — how *could* wages be higher in the United States? The source of all the income of a community obviously is the output of its industry. If its industry is no more effective, if its labor produces no more than that of another country, how can its material prosperity be greater, and how can wages be higher? A high general rate of real wages could not possibly be maintained unless there were in its industries at large a high general productiveness.

But when once these two concomitant phenomena have come to exist, — a high effectiveness of industry and a high general rate of wages, — it follows that any industry in which labor is *not* effective, in which the plane of effectiveness is below that in most industries, finds itself from the business point of view at a disadvantage. It must meet the general scale of wages in order to attract workmen; yet the workmen do not produce enough to enable that general scale to be met and a profit still secured. Such an industry, in the terms of the principle now under discussion, is working at a comparative disadvantage. It has a heavy compara-

tive cost. In other industries, product is high; that is, labor cost is low. In this industry, product is low; that is, labor cost is high. The industry does not measure up to the country's standard, and finds in that standard an obstacle to its prosecution.

Consider the same problem from the point of view of money wages. Here again we are beset by everyday fallacies and superficialities. High money wages, it is commonly alleged, cannot be paid unless there be high prices of the goods made. A dear man is supposed to mean dear bread, and a cheap man, cheap bread. Yet is it not obvious that if all bread and meat and coats and hats were high in price, high money wages would be of no avail? It is certain that not only are money wages higher in the United States than in European countries, but the prices of things bought are, on the whole, *not* higher. Although some things cost more, and the higher money wages therefore do not mean commodity wages higher in the same degree, these higher money wages do mean that real wages are higher by a substantial amount. The dear man does not, in fact, mean dear food. The explanation is obvious: although wages in money are high, the effectiveness of the dear man's labor on the whole is also high, and therefore goods on the whole are not dear. When a man who is paid high wages turns out a large number of pieces, each piece can be sold at a low price, and the employer still can afford to pay the high wages. With reference to individuals, the business world is constantly accepting this principle. A good man, we are told, is cheap even at high wages. To use the same phrase, a good industry is cheap even although high wages are paid in it. Where labor is effective, high wages and low prices go together.

None the less, an established high

rate of wages always presents itself to the individual employer as something that has to be overcome. And to the employee it presents itself as a thing in danger, — something that must be jealously guarded. Yet there is a real difficulty for the employer only when the effectiveness of labor is not great. And, for the employee, so far as the competition of foreign products is concerned, an industry needs no protection where this same essential condition is found. If, indeed, such effectiveness does not exist, then the American employer cannot pay the prevailing high rate of wages and hold his own in free competition with competitors in countries of lower wages. In other words, he cannot hold his own unless there is a comparative advantage in his particular industry. The general high rate of wages is due to the fact that in the dominating parts of the country's industrial activity the comparative advantage exists. These dominating industries set the pace; in them we find the basis of the high scale; it is they which set a standard which others must meet, and which presents itself to others as an obstacle.

The principle of comparative cost applies more fully and unequivocally in the United States than in any country where conditions are known to me. The difference in money wages between the United States and European countries is marked; the difference in 'real' or commodity wages, though not so great, is also marked. Notwithstanding these high wages, constituting an apparent obstacle for the domestic producers, the United States steadily exports all sorts of commodities, — not only agricultural products, but manufactures of various kinds. Evidently they could not be exported unless they were sold abroad as cheaply as foreign goods of the same sort are there sold. That these products of

highly paid labor are exported and are sold abroad, is proof that American industry has in them a comparative advantage.

There are other goods which, though not exported, are also not imported; goods where the balance of advantage is even, so to speak. They are the products of industries in which American labor is effective, yet not effective to the highest pitch; effective in proportion to the higher range of money wages in the country, but barely in that proportion.

And finally, there are the goods whose importation continues, even though there is no obvious obstacle to their domestic production from soil or climate. These are things which, it would seem, could be produced to as good advantage at home as abroad. They *could* be produced to as good advantage; but they lack the comparative advantage. They do not measure up to the standard set by the dominant industries. There are no physical difficulties in the way of their successful production; but there is an economic difficulty. They find in high wages an insuperable obstacle to competition with the foreigners. And in this class belong those industries which are protected, and which would not hold their own without protection. They are in a position analogous to that of the strictly domestic industries in which labor is not effective, but which are nevertheless carried on of necessity within the country, with high prices made necessary by high money wages. The obvious difference between the two cases is, that the force which causes the strictly domestic industries to be carried on is an unalterable one, such as the difficulty or impossibility of transportation; while that which causes the protected industries to become domesticated is the artificial one of a legislative barrier.

What, now, are the causes of com-

parative advantage? or, to put the question in other words, what are the industries in which a comparative advantage is likely to appear?

The more common answer has been, the agricultural industries. In a new country, with abundance of fertile land, labor is turned with most effectiveness to the extractive industries. Hence the United States has long exported wheat, cotton, meat products. Hence Canada is now a heavy exporter of wheat. Wheat is specially adapted to extensive culture, and is easily transportable; it is the commodity for which nature often gives to a new country in the temperate zone a clear advantage. Throughout the nineteenth century, the international trade of the United States no doubt was controlled chiefly by this cause. The country was in the main agricultural.

It should be noted, however, that not only the natural resources told, but the manner in which they were used. From the first, effectiveness and invention were shown. The United States soon became the great country of agricultural machinery. During the second half of the nineteenth century, the skill of the makers of agricultural implements, and the intelligence of the farmers who used the implements, were not less important factors than the great stretches of new land. Still another factor of importance was the cheapening of transportation. Our railroads have cheapened long hauls as nowhere else. The most striking improvements of this sort were made in the last third of the nineteenth century. Then new lands were opened and agricultural products exported on a scale not before thought possible. When the effectiveness of labor is spoken of by economists, the effectiveness of *all* the labor needed to bring an article to market is meant; not merely that of the labor immediately and obviously

applied (like that of the farmer in this case), but that of the inventor and the maker of the threshing-machine, and that of the manager of railways and ships. The labor of the directing heads, of the planners and designers, tells in high degree for the final effectiveness of the labor which is applied through all the successive stages of industry.

The economic condition of the United States began to change with the opening of the twentieth century. The period of limitless free land was then passed, and with it the possibility of increasing agricultural production under the specially advantageous conditions of new countries. For one great agricultural article, cotton, the comparative advantage of the country has indeed maintained itself, and the exports of cotton continue to play a great part in international trade. The exports of other agricultural products — wheat, corn, barley, meat products — have by no means ceased, nor will they cease for some time. But they tend to decline, absolutely and, even more, relatively. Other articles grow in importance, such as copper, petroleum, iron and steel products, various manufactures. For some of these, such as copper, the richness of our natural resources is doubtless of controlling importance. But the manner in which these natural resources are turned to account is important throughout; and in many cases the comparative advantage of which the exports are proof, rests not on the favor of nature at all, but solely on the better application of labor under conditions inherently no more promising than those of other countries.

What are the causes of advantage under these less simple conditions?

The question may be asked regarding a closely allied phenomenon, referred to a moment ago. A considerable range of manufactured articles,

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though not exported, are yet not imported. The domestic manufacturer holds the market, while paying higher wages than his foreign competitor. The range of such industries is, in my opinion, wider than is commonly supposed. It is obscured by the fact that our tariff system imposes useless and inoperative duties on many articles which could not be imported in any case. On the other hand, there is a considerable range of articles on which the duties have a substantial effect; articles which would be imported but for the tariff. There are, again, things which continue to be imported notwithstanding high duties, — which pour in over the tariff wall. Why the difference between the two sets of cases, — those in which the domestic manufacturer holds his own, irrespective of duties; and those in which he needs the duties, or even is beaten notwithstanding tariff support?

The answer commonly given is that American producers can hold their own more easily when much machinery is used. Then, it is said, wages will form a smaller proportion of the expenses of production, and the higher wages of the United States will be a less serious obstacle. But it requires no great economic insight to see that this only pushes the question back a step further. Why is not the machinery more expensive? The machinery was itself made by labor. A commodity made with much use of machinery is in reality the product of two sets of laborers, — those who make the machinery and those who operate it. If all those whose labor is combined for producing the final result are paid higher wages than in foreign countries, why cannot the foreigner undersell when much machinery is used, as well as when little is used?

The real reason why Americans are more likely to hold their own where

machinery is much used, and where hand labor plays a comparatively small part in the expenses of production, is that Americans make and use machinery *better*. They turn to labor-saving devices more quickly, and they use devices that save more labor. The question remains one of comparative advantage. Where Americans can apply machinery, they do so; and not only apply it, but apply it better than their foreign competitors. Their machinery is not necessarily cheaper, absolutely; often it is dearer; but it is cheap relatively to its effectiveness. It is better machinery, and the labor that works it turns out in the end a product that costs not more, but less, than the same product costs in countries using no such devices, or using devices not so good.

This sort of comparative advantage is most likely to appear in two classes of industries, — those that turn out large quantities of staple homogeneous commodities, and those that themselves make tools and machinery. A machine-using people directs its energies to best advantage where thousands of goods of the same pattern are produced. Specialties, and goods salable only in small quantities, such as luxuries bought by the rich, goods of rare pattern, and the like, — these are likely to be imported. Ready-made goods, all of one pattern, bought by the masses, are likely to be produced at home, without danger from competing imports. Goods made to order *must* be supplied by domestic producers, and these are likely to be what the customer thinks inordinately dear; because they are made preponderantly, or at least in greater degree, by hand labor, which is paid high wages, and which by the very condition of the case cannot use labor-saving machinery. Again, implements themselves, big and little, are likely to be well made in a country

where people are constantly turning to machinery: from kitchen utensils and household hardware to machine tools, electric apparatus, and huge printing-presses. These are things in which the success of American industry is familiar; which are exported, not imported; in which it is proverbial that the Yankee has a peculiar knack — only another way of saying that he has a comparative advantage.

In creating and maintaining this sort of advantage in manufacturing industries, the importance of the industrial leader has probably become greater in recent times. The efficiency of the individual workman is often dwelt on in discussions of the rivalries of different countries: aptitude, skill, intelligence, alertness, perhaps inherited traits. No doubt, qualities of this sort have counted in the international trade of the United States, and still count. The American mechanic is a handy fellow; it is from his ranks that the inventors and business leaders have been largely recruited; and he can run a machine so as to make it work at its best. But there is a steady tendency to make machinery automatic, and thus largely independent of the skill of the operative. The mechanics who construct the machines and keep them in repair must indeed be highly skilled. But when the elaborate machine has been constructed and is kept in running order, the operative simply needs to be assiduous. Under such circumstances, the essential basis of a comparative advantage in the machine-using industries is found in management, unflagging invention, rapid adoption of the best devices.

The business leader has been throughout a person of greater consequence in the United States than elsewhere. He has loomed large in social consequence because he has been of the first economic consequence. He has

constructed the railways, and opened up the country; he has contributed immensely to the utilization of the great agricultural resources; he has led and guided the inventor and mechanic. I am far from being disposed to sing his praises; there are sins enough to be laid to his account; but he has played an enormous part in giving American industry its special characteristics. His part is no less decisive now than it was in former times; nay, it is more so. The labor conditions brought about by the enormous immigration of recent decades have put at his disposal a vast supply of docile, assiduous, untrained workmen. He has adapted his methods of production to the new situation. His own energy, and the ingenuity and attention of his engineers and inventors and mechanics, have been turned to devising machinery that will almost run itself. Here the newly arrived immigrant can be used. So far as the American can do this sort of machinery-making to peculiar advantage, so far can he pay the immigrant wages on the higher American scale, and yet hold his own against the European competitor who pays lower wages to the immigrant's stay-at-home fellow. But it is on this condition only that he can afford (in the absence of tariff support) to pay him wages on the American scale, or on some approach to it, — namely, that he make the total labor more effective. The main cause of greater effectiveness must then be found, not in the industrial quality of the rank and file, but in that of the technical and business leaders.

A new possibility then presents itself, however, and one which has played a considerable part in recent tariff discussion. The more automatic machinery becomes, the more readily can it be transplanted. Is there not a likelihood that this almost self-acting apparatus

will be bought by the countries of low wages, and there used for producing articles at lower price than is possible in those countries of high wages where the apparatus originated? In hearings before our Congressional committees, a fear is often expressed that American inventors and tool-makers will find themselves in such a plight. American skill, it is said, will devise a new machine; then an export of the machine itself, or of its products, will set in. Next, some German will buy a specimen (the Germans have been arch-plagiarists), and reproduce the machine in his own country. Soon, not only will the exports of the machine cease, but the machine itself will be operated in Germany by low-paid labor, and the article made by its aid will be sent back to the United States. Shoe machinery and knitting machinery have been cited in illustration. The identical apparatus which has been brought in the United States to such extraordinary perfection is sent to Europe (even made in Europe by the American manufacturer), and is there worked by cheaper labor. The automatic looms, again, which have so strikingly influenced the textile industry of the United States and so much increased its effectiveness, are making their way to Europe, and here again are being pushed into use by the American loom-makers themselves. Is it not to be expected that they will be operated by cheaper English and German and French labor, and that their products will be shipped back to the United States, to the destruction of the very American industry which they had first made strong and independent?

This possibility is subject to exaggeration. It is not so easy as might be supposed to transplant an improved system of production, and all that hangs thereby. However automatic a machine may be, some intelligence and

knack in operating it are always called for; though less, perhaps, among the ordinary hands than among the machine-tenders and foremen. It is a common experience that machinery will yield better results in the country of its invention and manufacture than when transplanted. Those very automatic looms, just referred to, are making their way into Europe very slowly. They do not fit into the traditional industrial practices, and do not accomplish what they accomplish in the United States.

The difficulties which thus impede the transfer of machinery and methods, are most strikingly illustrated in the rivalry of the Orient. We hear frequently of the menace of the cheap labor of China, India, Japan. Will not those countries deluge us with the products of cheap factory labor, when once they have equipped themselves with our own machinery? The truth is that in all probability they will never equip themselves. To do so, would require more than the mere shipment of the machinery and the directions for working it. A completely different industrial environment and equipment would need to be transplanted. The yellow peril has been as much exaggerated in its economic as in its military aspect.

None the less, some possibility of this sort does exist, especially in the rivalry between those countries of advanced civilization which are more nearly on the same industrial level. It is by no means out of the question that shoe machinery or automatic looms may be worked as well in Germany as in the United States. Supposing this to be done, cannot the German employer, who gets his operatives at low wages, undersell the American employer, who must pay high wages? Is not the comparative advantage which the United States possesses in its ingenious ma-

chinery necessarily an elusive one, sure to slip away in time? The advantage may indeed be retained indefinitely, where skill or intelligence on the part of the individual workman is necessary. Even here there is a doubt whether it will persist, in view of the spread of education and technical training the world over. Certainly in the widening range of industries where the workmen merely tend semi-automatic machinery, the manufacturing industries of the country having high wages would seem to be in a perilous situation.

The only answer which can be given to questioning of this sort is that the leading country must retain its lead. As fast as other countries adopt the known and tried improvements, it must introduce new improvements. Unrelaxed progress is essential to sustained superiority. He who stands still, inevitably loses first place. Such was, in the main, the relation between England and the other Western countries during the first three quarters of the nineteenth century. English machinery was exported, and English methods were copied, throughout the world; but the lead of the British was none the less maintained. As fast as the other countries adopted the devices which originated in England, that country advanced with new inventions, or with goods of new grades. A similar relation seems to exist at the present time between Germany and the other countries which follow the German lead in some of the chemical industries. It appears again in the position of the United States in those manufacturing industries which contribute to our exports. As fast as the American devices are copied elsewhere, still other improvements must be introduced.

This will seem to the American manufacturer a harsh sentence, and to the ordinary protectionist a heartless one, even unpatriotic. What? To be

deprived of the fruits of our own enterprise and ingenuity, without protection from a paternal government against the interlopers? Yet I see no other answer consistent with a rational attitude toward international trade and the geographical division of labor. The gain which a country secures from its labor is largest when its labor is applied in the most effective way; and labor is applied with the greatest effectiveness only when it proves this effectiveness by sustained ability to hold the field constantly against rivals.

This course of reasoning can be carried further. It is conceivable that improvements and inventions will be so completely adopted in the end by all the advanced countries as to bring about an equalization in their industrial condition. The necessary consequence would be a lessening of the volume of trade between them. Where an invention is introduced in a single country, it gives that country at the outset a comparative advantage, leads to exports, and swells international trade. But if the improvement is adopted in all countries with the same effectiveness, if there is universal adoption of the best, then the ultimate consequences will be different. No one country will then possess advantages in manufactures over others; no one will be able to export to another; trade between them in manufactured goods will cease. All countries will secure, in the same degree, the benefit of the universalized inventions. All will be on the same plane, and differences in general prosperity and in rates of wages will be wiped out. Then there will be no room for comparative advantages based on invention, peculiar effectiveness, better machinery, more skillful organization. Under such conditions the only trade between countries would be that based on unalterable climatic, or physical, advantages; such trade, for

instance, as arises between tropical and temperate regions, and between temperate regions having markedly different natural resources.

This consummation will not be reached for an indefinite period; nay, probably it will never be reached. Certainly it is beyond the range of possibility for any future which we can now foresee. But some approach to it is likely to come in the relations between the more advanced countries. There is a tendency toward equalization in their use of machinery and of factory methods, and so in their general industrial conditions. For the United States especially, the twentieth century will be different from the nineteenth. The period of free land has been virtually passed. That great basis of high material prosperity, and of high general wages, is no longer as broad and strong as it was during the first century of our national life. The continued maintenance of a degree of prosperity greater than that of England and Germany and France must rest on other causes. In the future, a higher effectiveness of labor must depend almost exclusively on better implements and higher skill; on labor better led and better applied. It may reasonably be hoped that the United States will long remain the land of promise, in the van of material progress; but the degree of difference may be less than it was. This lessening difference will probably come about, not because the United States will fall back, but because other countries will gain on her. Such has been the nature of the changed relation between England and the countries of the Continent during the last generation; and such — to go back earlier — was the change in the relative positions of Holland and England in the course of the seventeenth and eighteenth centuries. England no longer retains the unmistakable leadership which she had over

the Continent during the greater part of the nineteenth century. But she has not retrograded; the countries of the Continent have progressed. Such is likely to be the nature of the coming race between the United States and other advanced countries. And this outcome is one which every friend of humanity must welcome. It means diffused prosperity, wider social progress.

For an indefinite time, however, differences in general industrial effectiveness will remain. They will obviously remain, so far as natural causes underlie them, — differences in soil, in mineral wealth, in climate. They will remain also in many manufacturing industries in which physical causes are not decisive. The United States, we may hope and expect, will apply labor-saving appliances more freely. The growth of the different industries will unquestionably continue to be affected by the accidents of invention and of progress, by dominant personalities in this country and in that, by the historical development of aptitudes and tastes, by some causes of variation in industrial leadership that seem inscrutable. But a general trend is likely to persist: in the United States, labor-saving devices will be adopted more quickly and more widely, and the people of the United States will direct their labor with greatest advantage to the industries in which their abilities thus tell to the utmost.

Nothing is more familiar in current talk on the tariff than the implication that it is desirable to 'acquire' an industry. When it appears that certain linen or silk fabrics are imported, or

lemons or sugar, some one will be sure to suggest that we clap on a duty in order to acquire one of these 'valuable' industries. The assumption is that domestic production is advantageous *per se*, and imports always disadvantageous. This is the unqualified protectionist doctrine: the crudest form of protectionism, but very widespread. He who holds it will, of course, pooh-pooh everything that has been said in the preceding pages. To him, all domestic industries are worth while, and always worth while. There is no question of choosing, still less of allowing capital and labor to take their unfettered choice. No; let us acquire any and every industry, and make all things within our own borders.

He who, on the other hand, accepts the reasoning of the preceding pages is not necessarily an unqualified free-trader. He may admit, for example, the force of the young-industries argument: that sometimes an industry which, in its earlier stages, failed to measure up to the country's standards, improves its methods in the course of time, and becomes effective and self-supporting. He may admit, too, that there are considerations not of a strictly economic character which may tell in favor of some protective duties. The tariff controversy ramifies far, and its aspects are quite too varied to be disposed of within the range of an article like this. But it is essential for an understanding of the controversy that one should reflect on this first question: What industries are worth while? Any and every industry? or those in which the energies of the country operate with greatest effectiveness?

THE CONTRIBUTORS' CLUB

THE MONSTRIFEROUS EMPIRE OF WOMEN

'*First Blast of the Trumpet against the Monstrous Regiment of Women.*' This title blows like a winter wind in these days when our magazines and papers are filled with controversies on the woman question, and with hot polemics on the feminist mind; and when suffragettes in England are smashing windows on the Strand, burning the King's mail, blowing up the house of the Chancellor of the Exchequer, and crushing the orchids in the gardens at Kew. It is the title of a book by worthy John Knox, written in Dieppe in 1557, and published in the goodly city of Geneva in 1558.

Brave John Knox was moved to blow this blast on the trumpet because a group of five women seemed to have in their control the realms of England, Scotland, and France, and the destiny of the Protestant Faith. These militant suffragettes were Catherine de Medici, Queen of France; Marie de Lorraine, Queen Regent of Scotland, and her daughter and sole heir, Mary, afterwards Queen of Scots; Mary Tudor, Queen of England, and her heir apparent, the Princess Elizabeth.

The horror of the persecutions in England under "Bloody Mary" was the immediate cause for this first blast of the trumpet. All this woe, Knox believed, was due to the 'monstriferous empire of women,' especially as they were personified in Mary, 'the cursed Iesabel of England.' So, as was his custom, brave John Knox spoke out, when most men considered it 'discrete' to be silent and to walk softly. 'And

therefore, I say, that of necessitie it is that this monstriferous empire of women (which amongst all enormities that this day do abound upon the face of the hole earth, is most detestable and damnable) — be openlie reviled and plainlie declared, to the end that some may repent and be saved.'

The reader will see that he blows his trumpet with no uncertain tone. He is not afraid of those who sit in the seats of the mighty. Let them hear! 'Even so may the sound of our weake trumpet, by the support of some wynd (blowe it from the southe, or blowe it from the northe, it is no matter) come to the ears of our chief offenders.'

Like a true Scotchman, John Knox is logical. He places his arguments in battle array. The Empire of Woman is

1. Repugnant to nature.
2. Contumelie to God.
3. The subversion of good order, of all equity and justice.

The first argument is obvious. 'Man, I say, in many other cases blind, doth in this behalf, see verie clearlie.' It is repugnant to nature that the blind should lead the blind, and 'that the foolish, madde, and phrenetike should govern the discrete.' And it is plain to see, he adds, that 'women compared to men are weak, sick, impotent, foolish, madde, phrenetike.'

The second argument is no less obvious to John Knox. The Empire of Woman is 'contumelie to God, a thing most contrarious to his reveled will and approved ordinance,' because so saith the scripture, especially Genesis and St. Paul. If females are not worthy to speak in meeting, how can the monstrous regiment be rulers of the realm?