

## PROTECTION FOR INVENTIONS.

(Paper read before the Society of Arts.)

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(Concluded from page 107.)

I will ask you to let me give two instances. One occurred about five-and twenty years ago, at a Government victualling yard, when an improvement in grinding wheat was being tried by the Government, at the cost, as I need hardly say, of the patentee. The improvement, if successful, as it was, would have lessened the hard work of the men, but beyond that not would not have interfered with them or their foreman in any way, and yet in this case there was a great amount, not of mere passive but active resistance offered. An inquiry was demanded and was held; it resulted in some of the offenders being discharged, while others were reprimanded. In this instance men in Government employment, where they might have counted on being retained during their working life, and pensioned in their old age, risked and forfeited these advantages, and for no other cause than that their self love was injured.

Another instance, much more recently, relates to the introduction of Siemens' furnace into large works. This was met with covert opposition by the foreman of the department, who used to report adversely of the furnace generally, while admitting that at times it would work well. The principal having privately made his own observations, and satisfied himself that the furnace would work perfectly if it had fair play, called his foreman, and said to him. "You say the Siemens furnace works well sometimes. Now, the furnace is not varied in construction, therefore when it does not work well it must be because it is not properly managed. The management is under your charge, and if in the course of the next three months you cannot manage it so that it shall work well at all times, I must get another foreman who will see that it does work well." The furnace worked well from that day.

I trust I have given you reasons enough and to spare why a prosperous manufacturer instead of seeking about for changes in his manufacture, looks upon all innovation with dislike, and wishes that, so far as his trade is concerned, "finality" may have been reached. Pardon my using a coarse, but expressive phrase, which is that you want somebody to "thrust improvement down the throats of manufacturers." A patentee is in the position to do this. He has his patent. Very likely he is not a manufacturer; his capital is not embarked in machinery adapted to an old style of things; he has every inducement to devote his time to persuading some one that his invention is valuable, that it will turn out so on trial; he offers to superintend all the experimental work, and thus to relieve the manufacturer from the loss of time and from the distraction of attention from his trade which must ensue if he himself or his staff have to work upon invention to the practicable stage, and then, provided with his patent, he can make an agreement with the person who first tries his invention, to the effect that if successful that person shall be rewarded by a share in the patent, or by being allowed to use the invention free of royalty or at a reduced royalty. By these means a patentee does frequently succeed in getting his invention put to work by the manufacturer, but all these means are needed to obtain this end; and, even, with their assistance, it is commonly a work of years before an invention is taken up. When taken up, and when proved a thorough commercial success, then, indeed, under the pressure of the competition of the improved process, other manufacturers may wish to work the invention, and, finding themselves unable to do so except on the payment of a royalty, may raise the cry, "Patents interfere with the freedom of trade." But is this so? What freedom has been interfered with? The industry as it stood before the invention is as open to them all as it ever was, but the power to exercise the invention itself cannot be had without payment of a toll. How are manufacturers damified by this? Suppose the inventor choose to carry on his process as a secret manufacture, it cannot I presume be contended that such a course, however undesirable, should be made illegal, and if not, those manufacturers who had not the secret would be unable to pursue the manufacture. Would anybody seriously call this "Interference with freedom of trade?" Assume that a landowner were

to go to a number of manufacturers in his district and were to say to them, "There is a large and unfailing supply of water on the other side of that hill. I have had the levels taken. I have consulted geologists, and I am convinced it is practicable to make a tunnel through that hill. If it were made you would bring here a water power which would save each of you a thousand a year in the cost of coals you now use for your steam engines. I should be willing enough to make the tunnel had I the money to spare. I have not, but the water and the hill are mine, and I will contribute the water and give a right of way through the hill as my share towards the realisation of the plan if you will subscribe among yourselves the necessary funds, and when the work is completed I shall expect to participate in the profits." Suppose the majority of the manufacturers turned a deaf ear to this proposition, did not believe in it, looked upon it as hopeless that a tunnel could be made through such a rock, dreaded the great cost of water wheels, and were afraid of finding the value of their steam engines reduced to one of the purely nominal character belonging to discarded machines. Suppose, I say, the bulk of the manufacturers addressed pursued this course, and refused to aid in the work of bringing the water to the district, would it be for them to raise the outcry of "Interference with freedom of trade," or would such an outcry be just, when those of their body who in conjunction with the landowner had succeeded in overcoming every obstacle, and in bringing the water power to their side of the hill, were to refuse to let those participate in the benefits who had not helped in the works. These men might truly say, "Your trade is just as free to you as ever it was. We have taken nothing from you, but we have by our own skill and at our own risk changed the conditions of our manufacture for the better. We can obtain power cheaper than of yore, but our refusal to let you share in it is simply a refusal to give up that which is our property." If such a refusal is to be called: "Interference with the freedom of trade," then every man who carries on a manufacture where he gets water power for nothing, if he refuses to share that power with his competitors in the neighbourhood, interferes with the freedom of trade, and every merchant who has a wharf which gives him better access to a navigable river or to a canal interferes with the freedom of trade, unless he shares his wharf with his rivals. Such propositions one sees at once are absurd, and could only be tolerated in a society of advanced Communists. But I confess I fail to see how the proposition that the use of an invention should be open to all, is not as rank communism as the condition of things I have assumed.

The second of the alleged evils is—That British manufacturers are put at a disadvantage as compared with those of countries where there is not a patent-law.

What is the practical answer to this? Great Britain, the United States, and France, all have efficient patent-laws, and must it not be admitted that in no other countries are manufactures so vigorous, or improvements so rife? Few countries claiming to be civilised are without a patent-law. Switzerland has none. Holland has recently given up her patent-law. Are these countries of progress or countries of invention? What do they do to advance manufactures? I once heard Lord Houghton say, at a discussion on patent-law, when the absence of a patent-law in Switzerland was cited, that he never heard of Switzerland being famous for any manufacture beyond alpenstocks and long hotel bills. So far from the existence of a patent-law putting the country which possesses it to a disadvantage, it is the means of causing ingenious foreigners to bring to that country their various inventions which, did they cease to become property when they reach its shores, they would withhold and would keep in their own land. Not only does a good patent-law bring in foreign inventions, but it attracts good men to come and reside amongst us, and to establish works in our country. A distinguished man, whose inventions I have referred to this evening, said on the occasion of a discussion on patent-law in Section F of the British Association, that he left his own country to settle here, mainly because the patent-law of that country was so defective he could get no adequate protection for his inventions. That gentleman, Dr. Siemens, is a naturalised Englishman; he has vastly improved many of our manufactures, and he is at this time an employer of some thousands of workmen, and is so in manufactures which have to a great extent risen out of his inventions.

The consideration of such facts as these makes it clear to