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APPEAL IN THE CORDITE CASE REJECTED.

It is not the less regrettable, because expected, that the appeal of the Maxim-Nordenfelt Guns and Ammunition Company against the judgment delivered by the English courts in the celebrated Cordite case has gone against the appellants. The judgment was given in such strong and explicit terms that it is scarcely to be expected that the Maxim-Nordenfelt Company will carry the case to any higher court. Whatever may be the technical merits of the case thus concluded between Mr. Maxim and the English government—and to our mind they lie entirely with the former—it must be generally admitted that the decision is a distinct "hardship," as it has been termed by a prominent English journal, upon the distinguished inventor. Mr. Maxim's smokeless powder was not one of that class of inventions that are suggested or prompted by some existing and profitable device. It was produced as the necessary counterpart of the Maxim rapid-fire gun, in experimenting with which it was found that the ordinary powder produced such a dense volume of smoke as to make it impossible to see the target. The smoke of the old powders, which was merely an inconvenience when the interval between shots was measured by minutes, became a positive obstruction when the interval was reduced to seconds. Mr. Maxim set out to produce a smokeless powder, and the result of a long series of costly experiments was the smokeless powder maxinite. It was by a mere rearrangement of the proportions of maxinite and the substitution of a constituent which differed from the one replaced, as was proved by its experts' own testimony at the trial, merely in name, that the English government succeeded in producing cordite—a powder which has never shown the stability possessed by maxinite, and only recently exploded in large quantity during some tests at the government proving grounds. It is certainly a hardship that after so many years of toil and expense the inventor should see the largest share of the material fruits of his labors, estimated by Mr. Maxim at several million dollars, snatched away from him on a legal technicality of the flimsiest description.

THE COMMERCE OF THE PORT OF NEW YORK.

There is food for thought and not much room for encouragement in the pages of the last report issued by the New York Chamber of Commerce. The first thing that is apparent in looking over the tables of imports and exports is the fact that, though in the preceding decade the volume of trade had been growing at a steady and rapid pace, in the present decade it has remained about stationary, the totals for 1896, indeed, being somewhat less than those for 1891. In view of the fact that the trade of the whole country that crosses the Atlantic seaboard is steadily increasing, this stagnation will come as a surprise to those citizens of New York who have never believed that it could possibly have a successful competitor as the great port of entry for the United States. The facts, however, are indisputable. What are the causes? One of these, to which we drew attention in a recent issue, is to be found in the difficult entrance to New York Harbor, and its inadequate depth as compared with the rapidly increasing size and draught of the large freighters which are being built for the American trade. It was only yesterday that a freight steamer of from 5,000 to 7,000 tons was considered to be exceptionally large, yet to-day we have a vessel plying regularly between this port and Europe which has a displacement of over 23,000 tons, and draws from 29 to 32 feet of water. A winding channel, with a mean depth of 30 feet, will be a constant menace to the safety of vessels of this class, and yet the present indications are that on account of their great earning power they will be built in increasing numbers in the near future. There are indications, however, that this difficulty is in a fair way to be removed, and surveys are now in progress looking to the creation of a 35-foot channel with a minimum width of 1,000 feet.

A more serious check to the commercial prosperity of this port—more serious because it is even now actively in operation—is the costly handling which most of the freight has to undergo between rail and ship when it reaches the Hudson River. New Yorkers who speak with some degree of pride of the vast and well organized system of lighterage on the East and North Rivers forget that, however well it may be carried out, this transfer by lighters is a heavy handicap upon New York in its competition with other Atlantic ports where the cars unload directly into the ship's hold. It is a well recognized fact among railroad men that the cost of handling is relatively far greater than the cost of haul, and this explains the fact that the mere transfer at New York figures as a far larger item in a through rate from Buffalo than the expense of the journey by rail. Although it is not our intention at this time to enter fully into the question of remedies, it may be pointed out, in passing, that just here is found one of the strongest arguments in favor of the construction of the North River bridge; for this structure, taken in connection with a belt line around the lower end of Manhattan Island, and the proposed railroad bridge

across the East River, would enable a train load of freight to be shipped from interior points and landed at any pier in New York and Brooklyn.

In its report to the Chamber of Commerce on improving the dock facilities of the port of New York the committee on the harbor and shipping mentions the following disabilities under which the port is laboring: A lack of proper and sufficient wharves and docks; exorbitant charges by the city; the requirement that steamship lines shall build their own sheds, which revert to the city at the expiration of the lease; that steamship lines have to pay for the dredging of the docks; and that there is a movement on foot to subject to taxation the very sheds for which the city practically receives rental, which the lessee never really owns, and which must revert to the city at the end of the lease.

On the face of it these appear to be very severe conditions, and viewed in the presence of the fact that competing ports are pursuing a very liberal policy toward steamship companies, the New York methods would seem to be almost suicidal.

Coupled with the above, which might be called the internal difficulties of the situation, are others of an external nature in the shape of discrimination by the trunk railroads in favor of other ports such as Baltimore, Philadelphia, and Boston. Freight can be shipped by rail to these ports for from 2 cents to 5 cents per hundred pounds less than it can to New York. Moreover, the railroads make an extra charge of 2½ cents per hundred pounds, or \$6 per car, on each car load of produce from Chicago to Europe by way of New York that has more than one bill of lading—a charge that is not made on freight through any other port. The injustice of this discrimination is too glaring to call for any comment. On the whole, it is satisfactory to note that every one of the evils above mentioned is remediable, and it is to be hoped that the rude awakening which has come to the business men of the metropolis as to the fancied commercial impregnability of the port will result in energetic measures to remove every stumbling block to the city's continued growth and prosperity.

ALLEGED FRAUDULENT PATENT BUSINESS.

As announced in the SCIENTIFIC AMERICAN of June 26, proceedings looking to the debarment of Wedderburn & Company from practice before the Patent Office were officially begun in Washington July 24, Assistant Commissioner A. P. Greely having been designated by Commissioner Butterworth to hear the evidence. The government was represented by Examiner F. W. Winter and Law Clerk Charles C. Stauffer, and the defendants by Judge Jere M. Wilson, William L. Ford and William H. Bond. The trial was begun with the presentation by the government of a large amount of documentary evidence which had been carefully arranged and alphabetically assorted. The charges are said to have contained many specifications of unprofessional methods pursued by the defendants, and to have cited cases of alleged fraudulent practice, Examiner Winter going over the evidence and claiming to have abundant proofs to sustain all the charges. "There were," said Mr. Winter, "devices submitted to this office by Wedderburn & Company that were unpatentable and upon which no two men could differ, all tending to bring the department into bad repute, the defendants in such cases excusing their failure to obtain patents for their clients by casting reflections upon the department," the clients in many cases proceeding with patent cases "on account of the prizes held out to them by the defendants," as part of a widely advertised scheme of awards for those who should obtain the greatest number of patents. It was also charged that the defendants were guilty of unprofessional practice in their advice to clients on the taking of appeals from the Commissioner's decisions, "thus securing large fees that were not deserved and were unfairly obtained."

In regard to searches, or preliminary examinations conducted in the Patent Office on the part of the defendant firm for their clients, to determine the probable patentability of an invention, one witness declared that he was employed by the defendants as a searcher, though he was known to be "without experience in the patent business or with mechanics or inventions," and that he was instructed to "report favorably" on cases which he "could not understand, or that seemed very complicated." This witness also mentioned several cases on which he was instructed to report favorably without any search. Other witnesses testified to similar effect.

On the part of the defendants it was claimed that they had always endeavored to practice before the department in an upright and honest manner; that they had not defrauded a single client; that they had always instituted a careful investigation in the office records before accepting fees or applying for patents, and that their offer of prizes was merely for the purpose of "stimulating the dormant inventive genius of Americans."

The trial is likely to be somewhat prolonged. It has attracted great attention in legal circles, and is necessarily of great importance to all who have business