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PROPOSED DISCRIMINATION AGAINST FOREIGN INVENTORS.

A dispatch from Washington says, at the request of the House Committee on Patents, General Berdan has prepared and submitted to the committee a bill to equalize the cost of patents to inventors in the United States and in foreign countries. In an argument before the committee General Berdan said that in England a patent costs about \$800, and runs fourteen years, while in this country a patent can be had for \$35, and many English inventors took out patents in this country, as well as at home, and he asserted that they should be charged the same for taking out a patent in the United States that it costs them in England. The bill, it is said, was favorably received by the committee.

The idea of compelling Englishmen to pay more for patents in this country than our own citizens, because the British fees for patents are larger than ours, is very old. Under the law of 1836 and up to the year 1861, the subjects of Great Britain were required to pay \$500 on filing an application for an American patent, and all other foreigners \$300. If the application was rejected, two-thirds of the sum paid was refunded and onethird retained by our government.

In 1861 this law discriminating between the inhabitants of the United States and those of other countries was repealed, and the same fees were established for all applicants, namely, \$15 on filing the application for patent and \$20 payable in the event of an allowance loses the first fee of \$15, which is supposed to cover the cost of the official examination.

Prior to the year 1861, the number of patents granted twenty patents in a year. Dating from the reduction of fees in 1861 to the present time, the yearly number of patents to Englishmen has gradually increased. In 1880 the number issued to them was 275; in 1890, it was 721. Of all foreigners, the English take the largest number. Germany comes next, with 452 granted in 1890: Canada, 371: France, 178: Austria, 71: Switzerland. 56; Sweden, 32; very few to other countries.

The total number of American patents issued in 1891 was 23.244. It will thus be seen that the ratio between patents granted to Englishmen and other foreigners, as compared with the total number of issued patents, is very small. Whether it is desirable to return to the old, abandoned system of discriminating against foreigners is very questionable.

The theory upon which we grant patents, and the object of our patent laws, is the promotion of useful arts and industries, not the taxation of inventors. The aim of our patent law is to encourage the study and gation, said recently that lobsters were not only dedevelopment of new inventions whereby multiplied creasing in numbers, but also in size. A two pound and diversified forms of novel industries are made lobster was now considered a fair average. accessible to the people; for by industry they thrive The American law, as it stands, invites inventors throughout the world to bring hither their new inventions, and set up their new industries; in reward for so doing, it grants them a patent for seventeen years, after which the invention becomes free to the public.

will be the number of new industries established, and our measure of prosperity correspondingly increased. polluted the waters. Lobsters were taken at Robins As a people we have everything to gain and nothing to Reef, New York Bay, as late as 1879, but they were lose by encouraging inventors, no matter where they i small and were not exposed for sale. live or where they were born. The price that other governments charge for their patents may be proper year, but the demand is five times greater during July, subject for diplomatic negotiation; but it has no bearing or concern with the industrial laws of our own 13573 country.

The proposed bill we regard as unnecessary and uncalled for. It is unwise. It is legislation for the repression of industry and inventive genius. Nations that are so short-sighted as to adopt such measures undoubtedly subject themselves to industrial losses. They are not examples for the United States to follow.

ARTIFICIAL PROPAGATION OF LOBSTERS.

During the past ten years there has been a great offered for sale was 101% inches and the average weight falling off in the supply of lobsters, until the price has two pounds. Ten years ago the average length was 13

marked improvement in the lobster fisheries during recent years."

A law was enacted by the New York Legislature in 1880, prohibiting the taking of lobsters smaller than ten and a half inches, but it was repealed, largely, it is said, by reason of the efforts of a hotel keeper in New York City with political influence, who was determined to serve small lobsters on his table, regardless of the effect of rescinding the regulations.

The difficulty of securing legislation on this subject runs for seventeen years. General Berdan said that of enforcing the laws when they are enacted, and preventing their repeal through the efforts of persons who have no regard whatever for the consequences of their acts, compels those who desire to see the supply of this wholesome food fish kept up to look to artificial propagation as the most available method for securing the object desired.

> In the volume entitled "The Fishery Industries of the United States," by G. Browne Goode and associates, the following statement is made regarding the cultivation of lobsters:

"The artificial propagation of lobsters has been rarely attempted, either in this country or in Europe, and in no case are we aware of its having been productive of satisfactory practical results. There are so many difficulties to overcome in an undertaking of this character, and the breeding habits of lobsters are so imperfectly understood, that it is not surprising that greater progress has not been made in materially aiding the increase in supplies by artificial culture, as in of the patent. If no patent is allowed, the applicant the case of the oyster and of many of our true fishes. That further study and persistent efforts may yet afford us the means of accomplishing so desirable an object is very probable, and is sincerely to be hoped to Englishmen was quite small, varying from twelve to for, in view of the apparent great decrease in the abundance of lobsters on many portions of our Atlantic coast."

> Since the above opinion was expressed considerable success has been achieved in the line of artificial propagation. The United States Fish Commission's hatchery at Wood's Holl, Mass., provides about three million young lobsters each year, and these are all placed in Vineyard Sound and Buzzard's Bay, owing to the impoverishment of the species in that vicinity.

> For three seasons lobsters have been hatched in small numbers at the station of the New York Commission, Cold Spring Harbor, L. I. Last season 27,700 were placed in the water at that point. The embryos are very delicate, and when lobsters are placed on ice, as many are which come to market, the embryo is generally ruined for hatching purposes.

> Fred. Mather, superintendent of the Cold Spring hatchery and a man of wide experience in fish propa-

New York is next to the largest receiving market for lobsters in the country, yet the lobster fisheries within the boundaries of the State are not now important, and are confined to eastern Long Island. In former years lobsters were found in large numbers in New York Bay and at Hell Gate. The disappearance of The larger the number of patents granted, the greater this food fish is due mainly to over fishing, but also to the establishment of manufactories, which have

> Lobsters are sold in New York during the entire August, and September than during any other three months of the year. The demand is the least during February and March. The consumption of lobsters at Coney Island in summer reaches 3,500 pounds a day.

> The experience on the coast of Maine seems to be similar to that already stated. In 1890 twenty million of lobsters were taken, which was a falling off of five million or twenty per cent from the catch of 1888 and ten per cent from 1889. There has also been a steady decrease in the size of the fish sent to market. During 1889 and 1890 the average length of lobsters

In photographing distant objects.—Reproductions of the work.— 9 illustrations. I. NAVAL ENGINEERING.—Life Saving Devices.—Some more products of the London Graphic competition.—Various methods of saving life from wrecked vessels.—Tillustrations. H. M. S. Bienheim, the New First Class Protected Cruiser, on Her Trial Trip.—A beautiful illustration of the sister ship of the Blake.—I illustration The Cruiser Troude.—A new fast cruiser recently completed at Bordeaux.—I illustration. II. PHOTOGRAPHY.—Photo-Engraving.—How the photographic details of the process should be conducted.—Valuable practical bints. XII 13560 13559 13560 XIII hints. N. TECHNOLOGY.—Glazing or Lustering Bodies.—Production of finishing compositions for cloth. Resins, Waxes, and Solid Paraffins.—By Prof. A. H. CHURCH.— Valuable resume of the commercial products failing under these classes 1356/ XIV 13563 13561

increased fully one hundred per cent. This applies inches and the weight three and one-half to four alike to the New York market, to the waters along the pounds. There are thirty-six factories on the coast of New England coast and in Canada and Newfoundland. Maine where lobsters, sardines, herrings and mackerels where lobster fishing and canning is an important inare packed.

dustry. The necessity for increasing the supply of Considerable progress has been made by the Newlobsters is generally recognized, and two methods are proposed for accomplishing this object. One is the propagation. The work was taken up two years ago enactment of laws which will check the depletion of the lobster beds by over fishing and the other is artificial propagation.

foundland Fisheries Commission in the way of lobster when the methods of the United States Fish Commission were adopted and their experience was made serviceable. A hatchery was located at Dildo Island.

Marshall McDonald, who is at the head of the United In the summer of 1889 4,039,000 lobster eggs were States Fish Commission, says: "I have always felt hatched, and the young lobsters planted around the that the maintenance of the lobster fishery rested head of Trinity Bay, the eggs having been obtained more essentially upon proper regulation of the matter from lobster packing establishments in the vicinity. by the States than upon any efforts in the way of arti- In prosecuting this work, Adolph Nielsen, superinficial propagation. The most usual regulation is that tendent, made the discovery that lobsters had two difprohibiting the sale of lobsters below certain dimen- ferent times for spawning. The larger run of lobsters sions; the minimum limit, though varying with the spawn from the middle of July till the middle of Audifferent States, being smallest in Massachusetts. In gust, while the smaller and middle sized ones spawn