

the courts to decide, should the proposed bill be passed by Congress.

Right or wrong the attempt by Congress to compel railways, as General Banks' bill reads, to "put into actual and continual use such inventions and improvements as shall, upon thorough trial tests, actually contribute to the comfort, security, and safety of persons being transported as passengers," and tend to prevent delays in the transmission of mails, etc., may be taken as a natural and inevitable result of the attempt on the part of the associated railways to refer all action with reference to improvements to an outside and irresponsible organization. And as the people of the United States are more numerous and more powerful than any possible association of railway officials, it is the reverse of politic on the part of the latter to provoke a conflict which can only result in their overwhelming defeat.

THE WESTERN RAILWAY ASSOCIATION AND THE PATENT LAWS.

Speaking of the failure of their efforts to secure the passage of the bill to effect a general amendment of the patent laws last winter, the executive committee of the Western Railroad Association say, in their report for the year just closed:

"For many reasons, but principally on account of the success which has of late attended the work of the association in contesting unjust claims, and in settling just ones equitably, your committee has made no special efforts in this direction during the present Congress."

American inventors will be pleased to see this frank admission by the association that for all legitimate purposes the patent laws are adequate as they stand. No fuller justification could be asked for the position taken by the friends of inventors during the contest in the last Congress, namely, that the general invasion of the constitutional rights of inventors proposed in the Association's bill (S. 300), was as unnecessary as its object was unjust. Now, having admitted that the present laws are sufficient to enable them to contest successfully unjust claims, and to settle just ones equitably—certainly all that any association can reasonably ask—it is to be hoped that the Western Railway Association will have the grace to cease to whine about the alleged oppressions of patentees, and refrain from further attempts to have the patent system recast so as to place inventors at the mercy of any who might choose to infringe their rights.

THE PROPOSED WORLD'S FAIR IN 1883.

One decided advance has been made toward securing a World's Fair in this city three years hence. The two rival organizations which had the project in hand have given place to a single committee made up of citizens of accredited social and financial standing. There has also been introduced in Congress a bill creating for the management of the proposed Fair a United States International Commission, composed of sixty honorably known citizens of New York, two commissioners from each State, one from each Territory, and one from the District of Columbia. It is further provided in the bill that the Exhibition be held under the direction of the Commission as one body; that the Board of Finance be elected by the subscribers to the stock, and that those elected thereby become, if not already so, a part of the Commission—thus avoiding any troubles that might arise from a dual organization; that the capital stock be placed at twelve millions of dollars, in shares of ten dollars each; and that foreign nations be invited by the general government to participate in its exhibition.

No appropriation is asked for, but there is no provision against such an application in the future. The list of incorporators is made up of names that ought to inspire confidence. Each of the gentlemen named has agreed to serve on the commission, and all together they furnish a reasonable guarantee that the undertaking will be wisely managed.

THE LOGIC OF GOVERNMENT CONTROL.

For a number of years the propriety of transferring to the National Government the control of railways and telegraphs, as in some European States, has been strongly urged in this country. This, on the plea of cheapness and good management, notwithstanding the too frequent experience that the business affairs of the government are apt to be badly conducted, and their results obtained at a far greater cost than for similar work in private hands.

The action of the British Postmaster General in relation to the telephone companies furnishes a pretty illustration of the logical result of such government monopolies. Every one knows that a few years ago the British Government acquired possession of all the telegraph lines of the United Kingdom, and made them a part of the postal service. By the same act, as English electricians aver, the government put a practical extinguisher upon telegraphic improvements in Great Britain—a natural result of bureau management. But this is not the worst of it. Government monopolies are not only fatal to progress in their tendency to discourage invention, but they are very apt to become aggressive, and try to suppress outside rivalry. Hence the natural but none the less amazing attack upon the English telephone companies by the Right Honorable Lord John Manners, who filed an information in the Court of Queens Bench, Jan. 20, asking an injunction to restrain the English Telephone Company and Edison's Telephone Company from using wires for the transmission of messages.

The next day in the Exchequer division of the High Court of Justice, application was made by the Attorney General

on the part of the Post Office for an *ad interim* injunction to restrain the English Telephone Company and the Edison Telephone Company from discharging the functions for which they were called into existence. After some discussion it was arranged that an injunction should not be taken, but that the defendant companies were to keep certain accounts until the hearing and final decision of the case. The argument on behalf of the Post Office is that telephones are telegraphs within the meaning of the act by which the latter inventions were committed to the charge of the Post Office Department, and the Attorney General represented it to be a serious grievance that the government, after spending millions on telegraphs, now found their monopoly interfered with by telephones, which he submitted were practically the same invention. It is reported, although this part of the question was not mentioned during the hearing, the Post Office officials hope to be able to compel the telephone companies to take out licenses from the Postmaster General and pay royalties for carrying on their business. The trial of the case is set down for an early day in February.

THE OWNER OF THE CAPE OF GOOD HOPE AND HIS OSTRICH FARM.

Mr. McKellar, who was most kindly hospitable, has an ostrich farm, but his flock of birds was not very large at the time of our visit, he having had bad luck at first in breeding.

He owns the actual Cape of Good Hope and a long stretch of the moorland adjoining, and has thrown a wire fence right across the peninsula, so as to give his ostriches the run of a large tract, stretching right down to the cape itself. One old hen ostrich was a pet about the house, but used to do sad damage in the farm yard eating the young goslings, swallowing them like oysters.

It was amusing to go with Mr. McKellar into one of his breeding paddocks; here a pair of ostriches were brooding on a nest of eggs, dividing, as usual, the labor between them.

The cock was very savage and attacked all intruders, so his master had a long pole with a fork at the end of it, and when the ostrich ran at the party he caught its neck in the fork. The ostrich was excessively enraged, but soon had to give in.

A kick from an ostrich is well known as very dangerous. The only thing to do when attacked without means of defense, Mr. McKellar said, is to lie flat down and let the bird walk on you till he is tired. I was astonished at the brightness of the red coloring developed on the front of the legs of the cock bird during the breeding season. The ornamental appearance of the bird is greatly enhanced by it.

A narrow but strong and high pen is provided for plucking the birds in. They are driven into it and held fast. It is found better to pluck the feathers out than to cut them off. The stumps, if left in, are apt to cause trouble.

Young ostriches, when first from the egg, have curious horny plates at the tips of their feathers, like those in the feathers of one of the Indian jungle fowls, and some other birds not in the least related to one another.

The cape peninsula becomes very narrow towards its termination, and ends in two capes, Cape Point, on which is the lighthouse, and the Cape of Good Hope. The Cape of Good Hope itself is a mass of rock, terminating in perpendicular cliffs toward the sea, but with ledges here and there, on which numbers of cormorants (*Phalacrocorax capensis*) nest.—*H. N. Mosley, Challenger Notes.*

Sewer Gas and Disease.

The authorities of one of the largest hospitals in London lately took measures to ventilate all the drains and sewers in connection with their institution. Up to the time these alterations were made, pyæmia and erysipelas had almost driven the medical staff to despair. When the whole of the ventilation was completed, and as soon as the pressure was removed from the traps of the closets and lavatories, no fresh cases were found to occur. For months the hospital wards were free from both erysipelas and pyæmia. Suddenly, however, there was a fresh outbreak of these diseases, but it was noticed that the epidemic was confined to one of the surgical wards, built apart from the main building, on the pavilion plan, and having only one story. Close investigation proved that the ventilation pipe in this wing had been stopped up by a careless workman. When this was remedied, all traces of the epidemic disappeared.

The Millers' International Exhibition.

A bill was passed in the House of Representatives, January 15, providing for the importation, free of duty, of all articles for exhibition at the Millers' International Fair, to be held in Cincinnati, Ohio, during the coming summer. The Exhibition will be opened June 1. The machinery will be shown in motion.

In view of the enormous interests involved in milling, the variety of grains made use of, the numerous rival systems and processes employed, and the wide range of invention covered by milling apparatus, it is safe to predict a notable Exhibition. American millers and mill furnishers are taking a lively interest in the Fair, and the president of the National Millers' Association reports a fine prospect for a full and instructive display.

MACASSAR OIL.—Sunflower oil, 100 grammes; goose grease and "kamfett," of each 15 grammes; liquid storax, oil of eggs, oil of thyme, cacao butter, of each 8 grammes; neroli, 4 grammes; Peruvian balsam, 0.6 gramme; otto of roses, 0.05 gram.—*Henkenius.*

Kind Words from Chicago.

Our newspaper contemporaries are constantly saying good words for the SCIENTIFIC AMERICAN and our other publications. We are not unmindful of such courtesies, although we seldom occupy space in these columns for giving them expression; but the following from the *Chicago Journal of Commerce* is so well put, we beg the indulgence of our readers for giving it place:

"The SCIENTIFIC AMERICAN is one of the really standard publications of the day. Established in 1845, it has now reached the thirty-fifth year of its publication. The success of this publication has been something remarkable, and its circulation is now fifty thousand copies weekly. It is a paper that ought to find its way into every workshop in the land, without a single exception. It is invaluable to the mechanic, artisan, and inventor, and the wide field it covers makes it alike invaluable to those interested in purely scientific and chemical pursuits. Its handsome pages and accurate illustrations of new inventions, machinery, workshops, and sketches in natural history are all in entire keeping with the active spirit of this progressive age, and there are, indeed, few publications more deserving of a place in the homes of our land. The SUPPLEMENT—which is a distinct paper from the SCIENTIFIC AMERICAN—contains sixteen octavo pages, with handsome cover, uniform in size with the SCIENTIFIC AMERICAN. This is really a royal issue, and while the price of the SCIENTIFIC AMERICAN is placed at \$3.20 per year, or \$1.60 for six months, the SUPPLEMENT is placed at \$5.00 per year, postage paid, to subscribers. Money could not be more judiciously expended than by subscribing for these publications."

The Indian and the Telephone.

An amusing application of the wonders of the telephone as an assistant detective of crime comes to us from Julian. Several horses were recently stolen in that neighborhood, and suspicion fell upon a certain Indian as the thief. Some one having introduced a telephone up there, the same was being exhibited, when it occurred to the owner of the stolen horses to get the Indian to come in and hear the "Great Spirit" talk. The Indian took one of the cups and was thrilled with astonishment at being apparently so near the Great Keeper of the happy hunting grounds. After some little time spent in wonderment, the Indian was solemnly commanded by the Great Spirit to "give up those stolen horses!" Dropping the cup as if he had been shot, the Indian immediately confessed to having stolen the horses, and tremblingly promised if his life was spared he would restore the "caballos" at once, and he did so.—*San Diego (Cal.) Union.*

Curiosities of the Telephone.

With a single telephone held, say, to the right ear, the transmitted voice appears to come from a distance to the right; while with a telephone held to the left ear, it seems to arrive from the left of the listener.

With a telephone to each ear, if one ear be less sensitive than the other, or if the telephone be held further from that ear, the voice apparently shifts to the side of the other ear; and if both ears hear alike and both instruments are equally near their respective ears, the voice apparently proceeds from in front of the observer.

Petroleum in Hanover.

Borings are being made in the Hanover petroleum district with such promising results as to make the prospectors extremely hopeful. A dispatch from Berlin says that the borings are now 60 feet deep, and the existence of a petroleum basin as large and rich as the one in Pennsylvania is regarded as beyond doubt by mining experts. The deepest borings already yield four hundred weights of oil per well daily, and the quality of the oil is improving. The work is being prosecuted by Hamburg and Bremen firms engaged in the American trade.

Cheap Indelible Ink.

Braconnet recommends the following: 20 parts of potassa are dissolved in boiling water, 10 parts of fine cut leather chips and 5 parts of flowers of sulphur are added, and the whole heated in an iron kettle until it is evaporated to dryness. Then the heat is continued until the mass becomes soft, care being taken that it does not ignite. The pot is now removed from the fire (allowed to cool), water is added, the solution strained, and preserved in bottles. This ink flows easily from the pen.—*Pol. Notizbl.*

Large Farming.

It is reported that Mr. Oliver Dalrymple, the great Minnesota farmer, intends to cultivate 30,000 acres of wheat this year. He will have 20 steam thrashers in operation with 135 reaping machines. Last year he employed 600 laborers, and this year will increase the number to 700.

THE woolen trade in France has been making rapid progress. In 1851 there were only 850,000 woolen spindles in that country, but now they number 2,270,000, thus distributed among the departments: Nord has 1,350,000; Marne, 160,000; Somme, 125,000; Ardennes, 120,000; Aisne, 140,000; others, 375,000. The value of the woolen yarns exported amounted to 32,200,000 francs; of manufactured goods, to 464,200,000 francs; of combed wool, to 30,900,000 francs; of woolen waste, to 36,700,000 francs; making a grand total of 564,000,000 francs. About 147,632,000 francs were paid for wages annually.