

SCIENTIFIC AMERICAN

A WEEKLY JOURNAL OF PRACTICAL INFORMATION, ART, SCIENCE, MECHANICS, CHEMISTRY, AND MANUFACTURES.

Vol. XXXIX.—No. 8.
[NEW SERIES.]

NEW YORK, AUGUST 24, 1878.

[\$3.20 per Annum.
[POSTAGE PREPAID.]

A Chance for Inventors.

An admirable opportunity for inventors is afforded by the necessity of the government of India, which demands some economical substitute for the wooden telegraph poles that so quickly decay in that climate; and the matter is one of more than ordinary interest, because of the rapid extension of telegraph lines there and the great probability of their large and immediate increase.

Iron telegraph poles have, it is true, been substituted for wooden ones in a number of instances, but neither the cost nor style of them gives satisfaction; what is sought for is a cheap tapering post, light enough for convenient handling, and strong and durable enough to withstand the climatic changes of the country.

These conditions are not yet satisfactorily filled by any of the present designs, and it seems evident to us that they can be only by a machine made post. For a combination of lightness and strength with cheapness, perhaps nothing could excel a post made of strips of iron wound spirally, and well locked and riveted; we have seen straight pipes made in this manner by machines, both here and in England, but they have not been approved of for the purposes alluded to because of their shape.

And in England especially the iron ship building interest seeks for a machine made tapering iron tube for masts and spars, for the manufacture of them now involves too much

hand labor, and consequent expense, to satisfy the builders, and they are ready to welcome the invention that will fill their requisitions. Here, too, the demand would doubtless be great enough to well reward the inventor, while the lighter and smaller tapering tubes would meet with ready sale for flagstaves, fence posts, and numberless other purposes.

THE DELAWARE SHIP CANAL.

The long talked of ship canal to connect Chesapeake Bay with Delaware Bay, and shorten the water route from Baltimore to New York and Europe some 225 miles, seems likely now to become a reality. The estimated cost of the canal—17 miles long, 100 feet wide, and 25 feet deep—is \$4,000,000; and the promoters claim that the present commerce of Baltimore would give to the canal an income of \$800,000 from the authorized rate of toll, 20 cents a ton. The canal is to follow the valley of the Sassafraz, and be without locks. By means of it vessels will be enabled to make three voyages between New York and Baltimore in the time now required for two, and the route will be much safer.

AMERICAN INVENTIONS IN BAVARIA.

We have received through the kindness of Mr. James M. Wilson, U. S. Consul at Nuremberg, a finely illustrated descriptive catalogue of the American tools and small me-

chanical devices on exhibition in the Industrial Museum of that city. The collection was made by the secretary of the institution, Dr. Seelhorst, who was one of the Royal Bavarian Jurors at the Centennial Exhibition. Impressed by the ingenuity and practical value of American inventions, Dr. Seelhorst not only collected a large number of the more portable specimens for the museum, but has since spent much time in pointing out to the manufacturers and artisans of Bavaria, in public lectures and otherwise, the special excellences of American products in this line. The catalogue gives with each figure the name of the inventor and the post office address of the American manufacturer.

EDISON'S MEGAPHONE.

From the time of the first man until now, men have endeavored to circumvent nature so as to grasp that which the unaided faculties could never attain. We have telescopes for viewing remote objects, microscopes for making visible the minute, telephones for talking over immense distances, and now, at last, we have a megaphone, which is to the ear almost what the telescope is to the eye, or the telephone to the vocal organs.

The speaking trumpet, which, for two centuries at least, has been employed to direct sound so that it may be heard over a long distance, is much used at sea, and is often em-
[Continued on page 114.]



EDISON'S MEGAPHONE.