

would have taken three hours. The engine is capable of making from 60 to 70 strokes a minute. It is scarcely necessary to point out to our readers the great improvement that has taken place in this department of machinery. It will be at work for some months, and we should advise all persons that are interested in machinery to pay a visit to the docks, to form their own opinion of its merits.—*Globe*.

**THE PATENT WIRE TYPE COMPANY.**—It is a somewhat extraordinary circumstance, that while such gradual but vast improvements have been made in the press, the type itself should have been left almost without modification for four centuries. It is gratifying, however, to find that this evil is likely to be remedied. A company is being formed for carrying on the manufacture of wire type, which, from its durability, and the clear and distinct nature of the letter, must in no long time entirely supersede the soft cast type at present in use. The proposed process of manufacture is this:—Wire (copper, brass, or zinc,) prepared of the proposed size or form, is rapidly converted into type; the machine straightens the wire, and cuts it off the required length; at the same moment a steel die strikes one end of the wire, and raises the face of the letter upon it, which, from the character of the metal employed, and the powerful compression to which it is subjected, is produced of a durability sixty times that of ordinary cast type. The type is produced at the rate of 100 per minute, with little or no waste in the manufacture. Complete machinery was exhibited in the Crystal Palace, where type was made and finished in the most perfect form, and the prize medal was accorded to the invention. In the list of directors of the above company, we perceive the name of Mr. Hensman, C.E. whose valuable services at the Great Exhibition, in the control of the machinery department, were so generally admitted, and whose name is a guarantee as to the value and genuine character of the proposed undertaking. From using type, we can appreciate the benefits offered by the new invention, which must prove highly profitable to the shareholders.

**THE FORMATION OF MOUNTAINS, AND THE PRESERVATION OF FLESH.**—Prof. Gorini, who is professor of natural history at the University of Lodi, made recently before a circle of private friends, a remarkable experiment illustrative of his theory as to the formation of mountains. He melts some substances, known only to himself, in a vessel, and allows the liquid to cool. At first it presents an even surface; but a part continues to ooze up from beneath, and gradually elevations are formed until at length ranges and chains of hills appear, exactly corresponding in shape with those which are found on the earth. Even to the stratification the resemblance is complete, and M. Gorini can produce on a small scale, the phenomena of volcanoes and earthquakes. He contends, therefore that the inequalities on the face of the globe are the result of certain materials, first reduced by the application of heat to a liquid state, and then allowed gradually to consolidate.—In another and more practically useful field of research the learned Professor has developed some very important facts. He has succeeded to a most surprising extent in preserving animal matter from decay, without restoring to any known process for that purpose. Specimens are shown by him of portions of the human body which, without any alter-

ation in their natural appearance, have been exposed to the action of the atmosphere for six or seven years; and he states that at a trifling cost he can keep meat for any length of time in such a way that it can be eaten quite fresh. The importance of such a discovery, if on practical investigation it is found to answer, will be more readily understood when it is remembered that the flocks of sheep in Australia are boiled down into tallow, their flesh being otherwise almost valueless, and that in South America vast herds of cattle are annually slaughtered for the sake of their hides alone.—*Times*.

**KEROSENE GAS IN NOVA SCOTIA.**—In the Nova Scotia Legislature the Hon. Provincial Secretary presented the report of Dr. Gesner on the subject of lighting the Nova Scotia Light Houses with Kerosene Gas. The Light House at Meagher's Beach had been placed by government under his charge. He has illuminated it at a charge of £19 per annum, making a saving of £50 a-year. Dr. Gesner has proposed to furnish the other houses in the same manner, so that a saving of £15,000 a-year would be effected by his means. The Dr. states that he can erect lights along the shores, without expensive houses, by raising poles and placing the lights on the top of them.

Hon. Mr. Johnston proposed that it should be referred to a special committee, with the Hon. and learned member opposite for its chairman. If he wished to have a simple and clear illustration of the benefits of the Kerosene Gas, he had only to go across in the Dartmouth steamer, and inspect the works of the Steamboat Company for procuring their gas. The thing was quite simple, and not only had they their buildings and lamps on the wharf lighted with it, but by a portable India Rubber bag it was brought into the boats, and they were lighted with it every night. The works were managed with such ease, that they were now under charge of a common labouring man.

The Report was referred to Messrs. Fraser, Marshall, Killam, James Coffin, Cowie, John Munro, and Jost.

We perceive that, in connexion with this light, the Doctor proposes to introduce one or more illuminated letters to each beacon, visible beyond the reach of danger, and thus capable of letting the mariner know his whereabouts in a manner not to be mistaken. This is an excellent idea.

People have been asking Dr. Gesner if his kerosene gas is not dangerous, and he has replied that it is no more dangerous than other gases. Gas has been used for light-house purposes on the coast of France, and answers the end admirably.

**KNITTING MACHINE.**—There is a knitting machine in operation in Philadelphia, which knits three hundred and eighty stitches at each turn of a small crank which crank may be easily turned by hand from one hundred, to one hundred and fifty revolutions per minute, or at the rate of about three million stitches per hour.