Machinery and Appliances.

IMPROVED DROPBOX LOOM.

Mr. Wright Shaw, as many of our readers may be aware, has long held a distinguished place amongst textile inventors. His specialty is the drop or dropbox loom, and his inventions mainly relate to the methods and mechanisms of operating the looms. In the order of his inventions he was the successor of the great "Diggles," whose chain motion at one time held the fold against all comers. It is given to few men, however, to maintain a perpetuity of fame in the realms of politics, science, or invention. Were it possible, it would indicate that the world had got to the end of its progressive march; therefore, "Diggles" is passing away into the shades of oblivion. The chain motion did good service in its day, and has a strong claim to be remembered as a distinct step forward from anything that had entered up to the date of its invention.

The textile art is one of the oldest in the world, and there are strong reasons to suppose that dressing woven fabrics is almost as old as the art itself. The records of Assyria and Egypt, and the remains of fabrics found in the tombs of the people of the latter country, go far to demonstrate this. Practically these people had left no descendants of whom we could inquire, so we are naturally compelled to be content with the remains they have left buried in the sands of the desert or graven upon the rocks, and which we of to-day are so audaciously desecrating. Existing European nations have fairly abundant evidence that their remote ancestors were skilled in the art of weaving, and know how to check their fabrics. Indeed, they were more expert at this than at other methods of communication. If such a conclusion may be safely drawn from the balance of evidence. The art, however, only underwent slow development. The textile genus which have been handed down to the present day were the achievements of a man whose degree of manual skill and enduring patience. The primitive method of checking woven fabrics came down through the long centuries almost to our own day without material change. It was reserved for a Lancashire man—Mr. Wright Shaw, as the son of John Kay, of Bury, to effect a change. Wearing in this day was performed by the weaver throwing his shuttle from hand to hand through the eyes many in the loom; a slow and tedious process, but which was in this England of ours in out-of-the-way nooks in Wales, where the serious writer may find the descendants of King Edward's Flamingo pursuing their gentle craft in the manner of their forefathers, as such people as the Keys, Cartwright, Bullough, and Diggle—may we not add the inventor whose manifestation of skill is of present under our notice—had never heard? "Somebody must be first, sir!" as the loom makers who are still making these type looms have now been expired for many years. It is very remarkable that a man should thus be compelled to compete against himself after such a long lapse of time.

Mr. Shaw exhibited a loom at the recent Manchester Exhibition, which was greatly admired for its simplicity and efficiency. Of this the writer can personally testify, as he was there and frequently examined it for a special purpose. It perfectly justified the challenge to the inventors and makers to throw down the loom making fraternity when he said in "The Champion Scour, Handkerchief, and Check Loom." Of this loom he said: Mr. Shaw will supply to interested parties a full and illustrated description. But unfortunately no mechanical genius is not a very quiet hobby to ride; it must be pressing forward even though
Industrial Labour in Indian Prisons.

(From Our Own Correspondent.)

Bombay, 9th Dec., 1889.

In connection with the above process there is a general idea among the public that the labour in which long-term convicts are forced to engage consists chiefly of oakum picking and stone breaking. This, although a somewhat narrowed view, is comparatively correct when the contrast between convict labour in India and that in England is shown. In England it is employed to even the lowest of criminals, and to acquire a practice in the different processes of building and in the trade of the mason. Each convict prison in Great Britain employs a certain number of workmen in various trades, which are taught to the inmates during their term of service. In India, on the other hand, it is employed almost exclusively for the purpose of obtaining the necessary materials for the public works. The convict is required to work a certain number of hours a day, and the work is of a very hard and arduous nature. The convicts are generally employed in the construction of fortifications, the repair of roads, and the laying of canals. The work is performed under the supervision of a master-mason, who directs the work and ensures that it is carried out according to the specifications of the plans.

The improvements now introduced consist in the first place of a new pattern arrangement. The front spring lever handle, as shown in the illustration, is a pattern, to which the existing arrangement of the springs is attached. The end of the handle is a projection, the thickness of which is increased at its extremity in order to bring closer to the handle. When the locks are working the projection is held out of action by the pattern rod and handle mentioned above. When the work begins or it is necessary to load the vehicle, both the handle springs will be released and the parts springing out from the doors will support both the handles, thus making it easier to unlock the doors.

These improvements certainly add to the usefulness of the vehicle, and in the case of the pattern rod and handle, as shown in the illustration, it is a pattern that is used for the purpose of protecting the door from the action of the spring. The pattern rod and handle are made of a strong material, and are designed to prevent the door from being forced open. The pattern rod and handle are made of a strong material, and are designed to prevent the door from being forced open. The pattern rod is shown in the illustration, and it is a pattern that is used for the purpose of protecting the door from the action of the spring. The pattern rod and handle are made of a strong material, and are designed to prevent the door from being forced open. The pattern rod and handle are made of a strong material, and are designed to prevent the door from being forced open. The pattern rod is shown in the illustration, and it is a pattern that is used for the purpose of protecting the door from the action of the spring. The pattern rod is shown in the illustration, and it is a pattern that is used for the purpose of protecting the door from the action of the spring. The pattern rod and handle are made of a strong material, and are designed to prevent the door from being forced open. The pattern rod is shown in the illustration, and it is a pattern that is used for the purpose of protecting the door from the action of the spring. The pattern rod and handle are made of a strong material, and are designed to prevent the door from being forced open. The pattern rod is shown in the illustration, and it is a pattern that is used for the purpose of protecting the door from the action of the spring. The pattern rod and handle are made of a strong material, and are designed to prevent the door from being forced open. The pattern rod is shown in the illustration, and it is a pattern that is used for the purpose of protecting the door from the action of the spring.