

Machine for making pins.—Some further reflections are suggested by the preceding analysis but it may be convenient previously to place before the reader a brief description of a machine for making pins, invented by an American. It is highly ingenious in point of contrivance, and, in respect to its economical principles will furnish a strong and interesting contrast with the manufacture of pins by the human hand. In this machine, a coil of brass wire is placed on an axis; one end of this wire is drawn by a pair of rollers through a small hole in a plate of steel, and is held there by forceps.—As soon as the machine is put in action.

1. The forceps draws the wire on to a distance equal in length to one pin; a cutting edge of steel then descends close to the hole through which the wire entered, and severs a piece equal in length to one pin.

2. The forceps holding the wire moves on until it brings the wire into the centre of the *chuck* of a small lathe, which opens to receive it. Whilst the forceps returns to fetch another piece of wire the lathe revolves rapidly, and grinds the projecting end of the wire upon a steel mill which advances towards it.

3. After this first, or coarse pointing, the lathe stops, and another forceps takes hold of the half pointed pin, (which is instantly relieved by the opening of the *chuck*,) and conveys it to a similar *chuck* of another lathe, which receives it, and finishes the pointing on a fine steel mill.

4. This mill again stops, and another forceps removes the pointed pin into a pair of strong steel clams, having a small groove in them by which they hold the pin very firmly. A part of this groove, which terminates at that edge of the steel clams which is intended to form the head of the pin, is made conical. A small round steel punch is now driven forcibly against the end of the wire thus clamped, and the head of the pin is partially formed by pressing the wire into the conical cavity.

5. Another pair of forceps now removes the pin to another pair of clams,

and the head of the pin is completed by a blow from a second punch the end of which is slightly concave. Each pair of forceps return as soon as it has delivered its burthen; and thus there are always five pieces of wire at the same moment in different stages of advance towards a finished pin. The pins so formed are received into a tray, and whitened, and papered in the usual manner.

About sixty pins can thus be made by this machine in one minute; but each process occupies exactly the same time in performing.

A fine Chance for the Ladies.—Heretofore, with the single exception, we believe, of the Princess Daskkoff, *Doctorates* have been only conferred upon males, but females are now about to participate in these learned distinctions.—The Legislature of Indiana has chartered a new College, called "The Christian College," at New Albany, alike open to males and females, with power to confer degrees. In the female department, they have established the Degrees of *Doctress* of Natural Science, of English Literature, Belles Lettres, the Fine Arts, and of Arts and Sciences—so that in a few years, *Doctresses* will be made as rapidly as our medical schools make Doctors of Medicine. Our young men had better be on the look out or they will be completely overshadowed by the learned *Doctresses* who will issue from this College.

Great Canal of Goetha.—This magnificent water-line, which passes through the heart of Sweden, and unites the North Sea and the Baltic, was opened with great solemnities on the 26th of September last. It will admit vessels drawing 9 1-2 feet water, and 22 feet in width; and they may make the passage into the Baltic in eight days, with the aid of steam-boats across the lakes which occur in its line. It has been 22 years in construction, and cost rather more than \$10,430,000, (£1,285,000), of which \$7,378,334 were contributed by the state.