C. Weiler,

Combing Mach.

No. 113,825. Patented Apr. 18. 1871.

Fig 1.

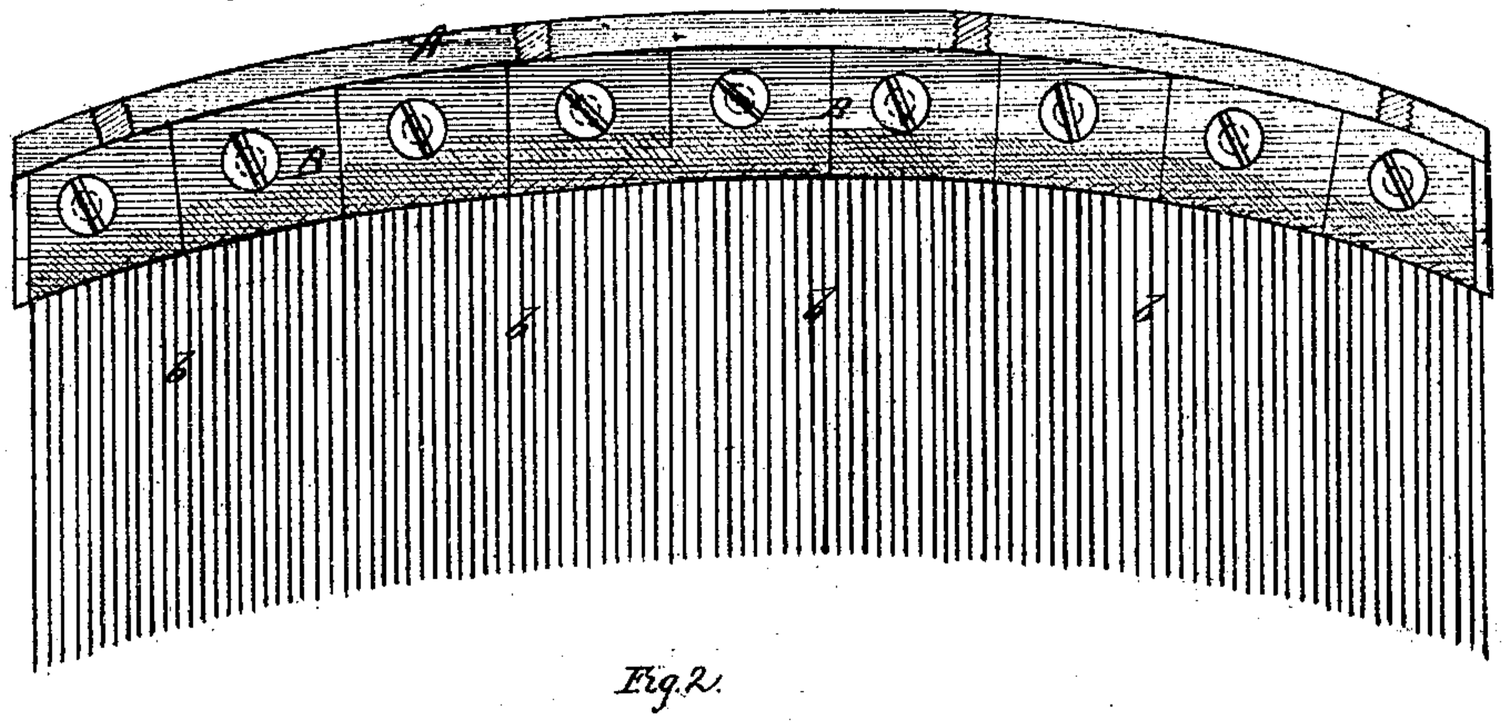

Fig 2.

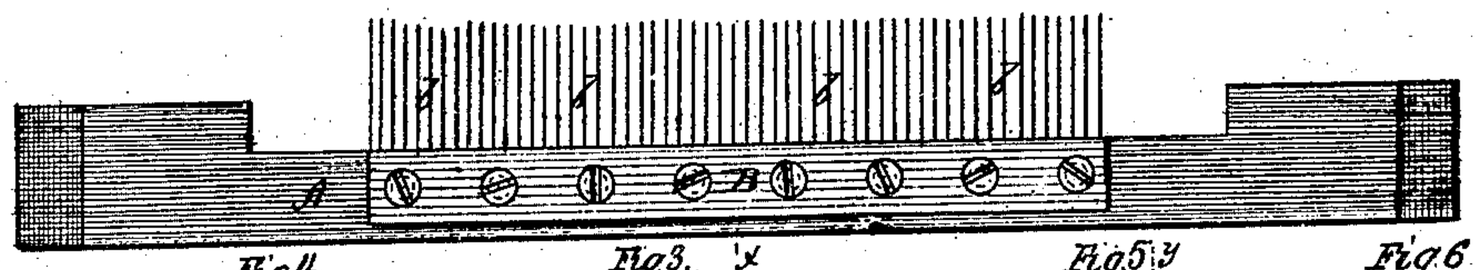

Fig 4.

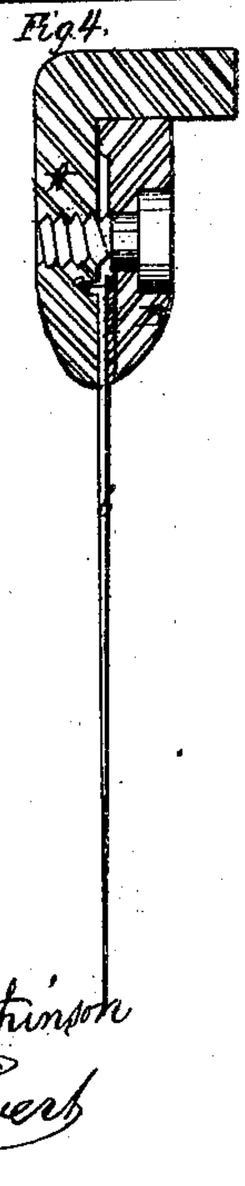

Fig 3.

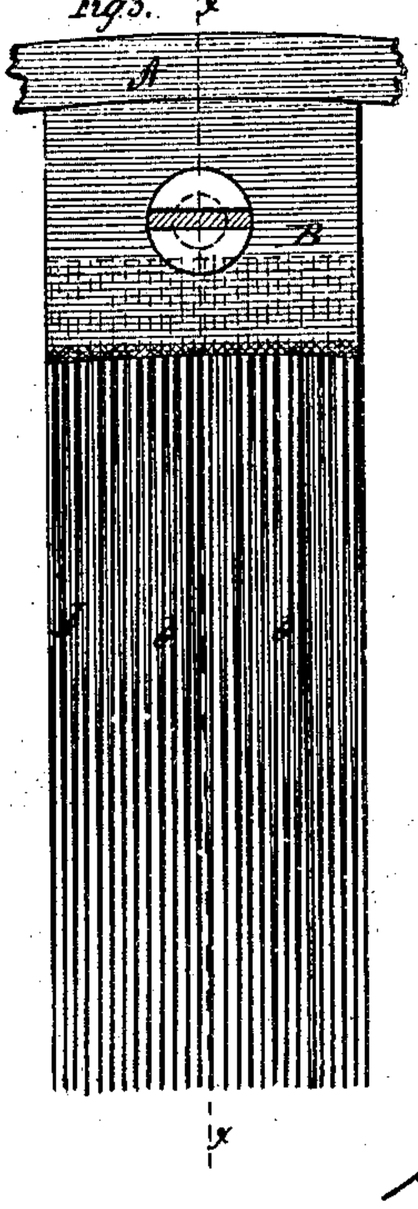

Fig 5.

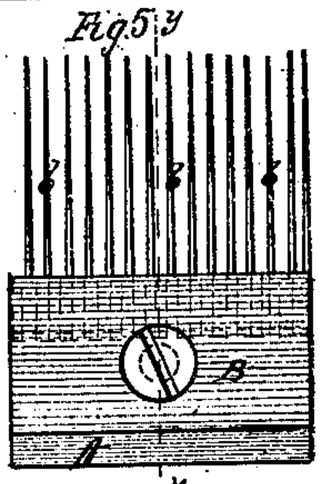

Fig 6.

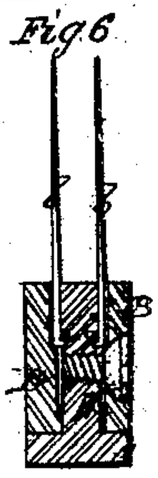

Fig 7.

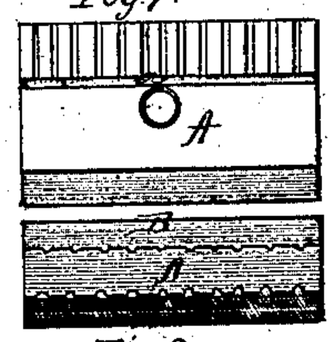

Fig 8.

Witnesses.

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Inventor.

Charles Weiler

per

Alexander Mason

Attys.

United States Patent Office.

CHARLES WEILER, OF LANDENBERG, PENNSYLVANIA, ASSIGNOR TO MARTIN LANDENBERGER & CO., OF SAME PLACE.

Letters Patent No. 113,825, dated April 18, 1871.

IMPROVEMENT IN COMBS FOR COMBING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHARLES WEILER, of Landenberg, in the county of Chester and in the State of Pennsylvania, have invented certain new and useful Improvements in Carrying and other Combs; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in a new method of securing the pins in carrying, falling, and other combs for worsted machinery, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view of my improved carrying-comb;

Figure 2 is a side view of my improved faller, showing how my improvement may be applied to two rows of pins;

Figure 3 is a small portion of fig. 1, enlarged;

Figure 4 is a section of fig. 3 through line *x x*;

Figure 5 is a small portion of fig. 2, enlarged;

Figure 6 is a section of fig. 5 through line *y y*;

Figure 7 represents fig. 5 with the outer plate removed; and

Figure 8 is a plan view of fig. 7.

In the old form of carrying and falling-combs the pins are inserted and soldered into holes, and in event of the breaking of the pins they must be punched out and replaced by others.

The expense together with the knowledge that the combs will only stand two operations of the kind necessarily induces the manufacturer to defer it as long as possible, and the combs are generally in a very bad condition when taken out, so much so that they often allow small pieces of uncombed wool to pass into the yarn.

The expense for every machine in a year is very large, whereas in my improved combs this expense is almost entirely obviated, and a comb can be repaired in a few minutes. If only one pin breaks it can be replaced immediately, and the comb kept in excellent working condition, simply by removing one or more plates and replacing the pin by a new one, then securing the said plate or plates again. This simple operation can be done without removing the comb from the machine.

A represents a bed-plate, made of any suitable metal, and a groove, *a*, is made in the same running the whole length of the plate at a uniform distance from the edge.

The pins *b b* are constructed with a small hook at the end, as shown in figs. 4 and 6, and they are laid on the bed-plate A, with the hook projecting into the groove, which effectually prevents them from pulling out. After they are laid in their places the plate or plates B are screwed down on them and hold them fast.

The plates B are provided with a small strip, *i*, of leather or other elastic material, immediately over the pins, to make up for any deficiency in the bed-plate A.

When the pins are placed some distance apart, as shown in fig. 5, the construction is the same, except that grooves are formed in the bed, as at figs. 7 and 8, into which each pin is laid.

It is obvious that by this construction of a comb it will last as long as the machine it forms a part of, and altogether dispense with the necessity of having duplicate combs.

The groove for the insertion of the hook on the end of the pin may be formed in the covering-plate B, or, if a head is formed on the pin instead of a hook, there may be a groove in both the bed-plate and the covering-plate.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The comb for worsted machinery, consisting of the grooved bed-plate A, the plain pins *b b* constructed as described, having hooks on their lower ends, and the covering-plate B, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of December, 1870.

CHARLES WEILER.

Witnesses:
A. H. SHOEMAKER,
MARTIN LANDENBERGER, Jr.