T. H. THOMPSON.

Trace Trimming and Creasing Machine.

No. 201,208. Patented March 12, 1878.

Fig. 1.

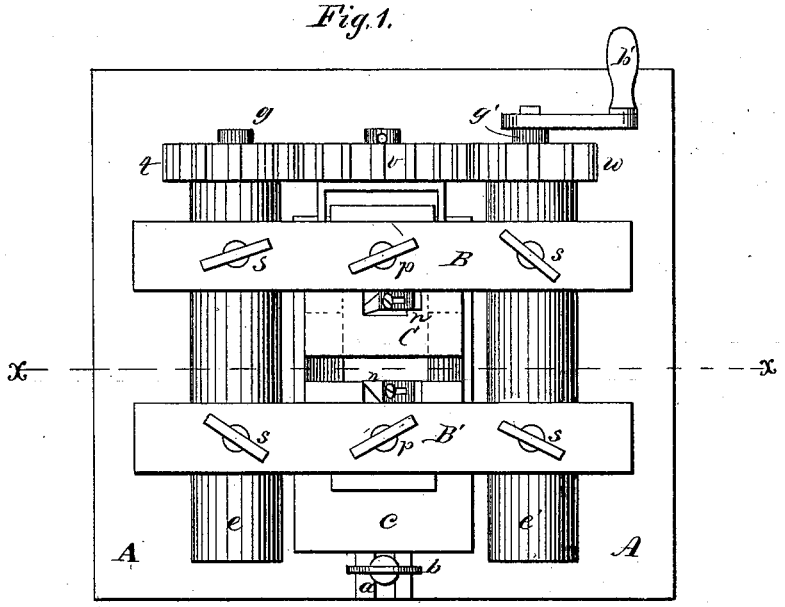


Fig. 3.

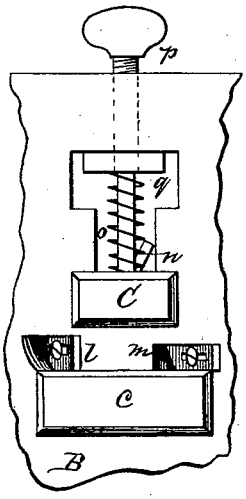


Fig. 2.

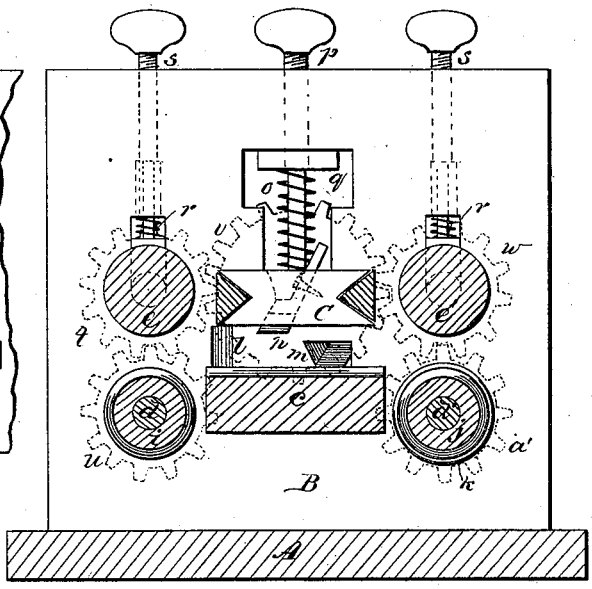
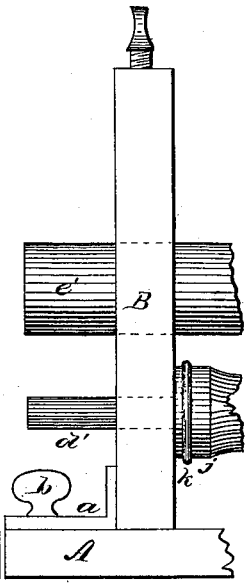


Fig. 4.



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THOMAS H. THOMPSON, OF BENSON, MINNESOTA.

IMPROVEMENT IN TRACE TRIMMING AND CREASING MACHINES.

Specification forming part of Letters Patent No. **201,208**, dated March 12, 1878; application filed January 25, 1878.

To all whom it may concern:

Be it known that I, THOMAS H. THOMPSON, of Benson, in the county of Swift and State of Minnesota, have invented a new and Improved Trace Trimming and Creasing Machine, of which the following is a specification:

Figure 1 is a plan view. Fig. 2 is a vertical section taken on line *x x* in Fig. 1. Fig. 3 is a detail view of a portion of the side of the machine. Fig. 4 is a partial side elevation.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a compact and simple machine for trimming, edging, creasing, and smoothing traces of harness in a single operation.

The invention consists in the combination of adjustable rollers and cutters, as hereinafter described.

Referring to the drawing, A is a bed-piece, to which are attached the fixed support B and the adjustable support B′, the latter being provided with a slotted ear, *a*, through which a binding-screw, *b*, passes into the bed A. A table, *c*, is attached to the support B, and passes through a mortise in the movable support B′. On one side of the table a shaft, *d*, is journaled in both of the supports, and in the same way upon the other side of the table a shaft, *d′*, is journaled. Above the shaft *d* a roller, *e*, is placed, which rotates in a journal-box in the movable support B′, and is provided with a gudgeon, *g*, that turns in a box in the stationary support B. A roller, *e′*, is placed above the roller *d′*, and is journaled in a box in the movable support B′, and has a gudgeon, *g′*, that is also journaled in a box in the fixed support B. These rollers, as well as shafts *d d′*, project through their boxes in the movable support, so that by moving the support B′ the machine may be adapted to traces of different widths.

On the shaft *d* a plain roller, *i*, is placed, and on the shaft *d′* is placed a roller, *j*, having near each end a narrow rounded flange or circumferential rib, *k*, which creases the trace as it is rolled through the machine.

In the supports B B′ knives *l*, having straight edges, are secured above the table *c*, and project beyond the inner face of the supports sufficiently to trim the edges of the trace, knives *m*, having beveled edges, are also secured in the side pieces B B′, for removing the lower corners of the trace. Above the table, and above the knives *l m*, there is a movable knife-support, C, in each side of which beveled knives *n* are secured for trimming the upper corners of the trace.

The knife-support C is placed in slots in the side pieces B B′, and pressed downward by springs *o*, that abut against shoulders formed on the screws *p*. By means of these screws the pressure of the springs is increased, so that the knife-support C is pressed downward with more or less force. The screws *p* are provided with jam-nuts *q*, which prevent the screws from becoming accidentally loosened.

The upper half of the journal-boxes of the gudgeons *g g′* and the rollers *e e′* are pressed downward by springs *r*, that abut against the lower end of the screws *s*, that pass downward in the supports B B′.

The rollers on the shafts *d d′* are changeable, so that rollers of different length, adapted to traces of different width, may be employed.

The gudgeon *g* is provided with a spur-wheel, *t*, that meshes into a similar spur-wheel, *u*, on the shaft *d*, and takes its motion through an intermediate wheel, *v*, from the wheel *w* on the gudgeon *g′*. The shaft *d′* is provided with a spur-wheel, *a′*, that meshes into the wheel *w*.

The gudgeon *g′* is provided with a crank, *b′*, by which the machine is operated.

The trace to be trimmed and creased is introduced between the rollers *d i*, and carried forward over the bed *c* and between the rollers *e′ j*, being creased by the latter.

By means of my improved machine traces may be trimmed, smoothed, and creased more rapidly, and in a much better manner than the same work can be done by hand.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a trace trimming and creasing machine, the rollers *e e' i j*, journaled at one end in a fixed support, and journaled at the other end in a movable support, and the knife-holder C and table *c*, in combination, substantially as herein shown and described.

2. The knife-holder C, carrying knives *n*, the supports B B', having knives *l m*, and the table *c*, in combination, for trimming the edges and corners of the trace, substantially as herein shown and described.

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Witnesses:
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