

(No Model.)

T. W. HARDING.

COVERING FOR THE CYLINDERS OF SHODDY AND RAG PICKERS.

No. 268,015.

Patented Nov. 28, 1882.

FIG. 1

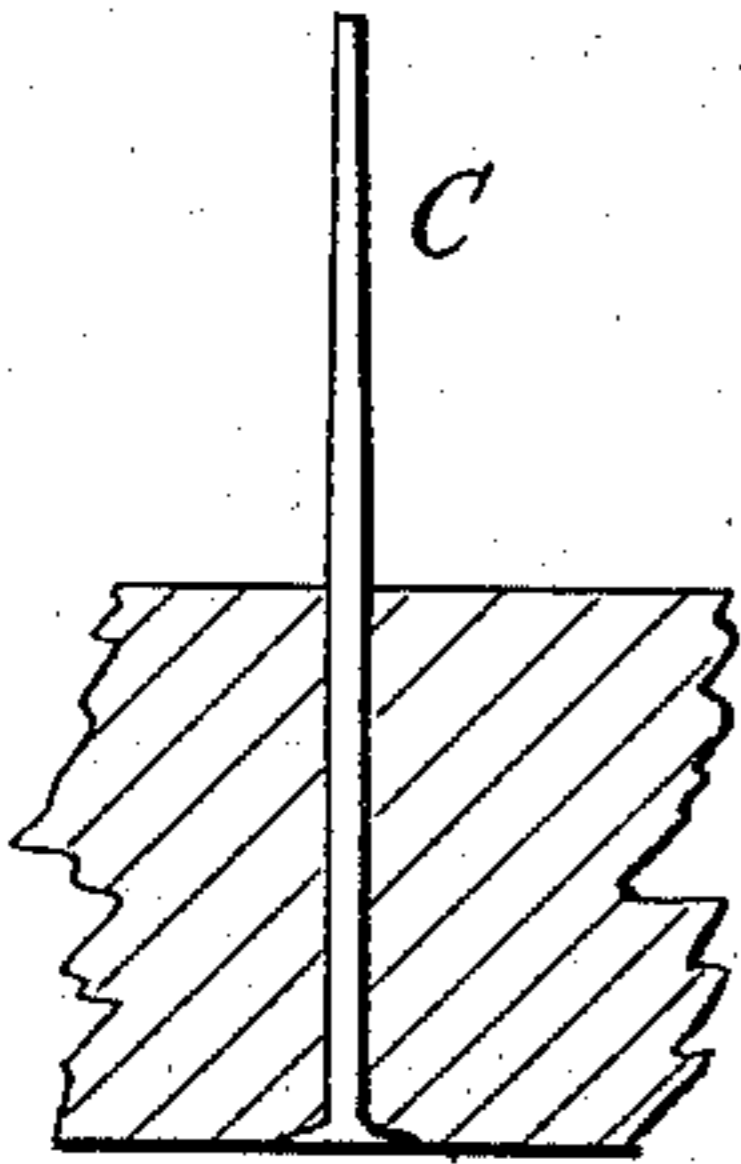


FIG. 2

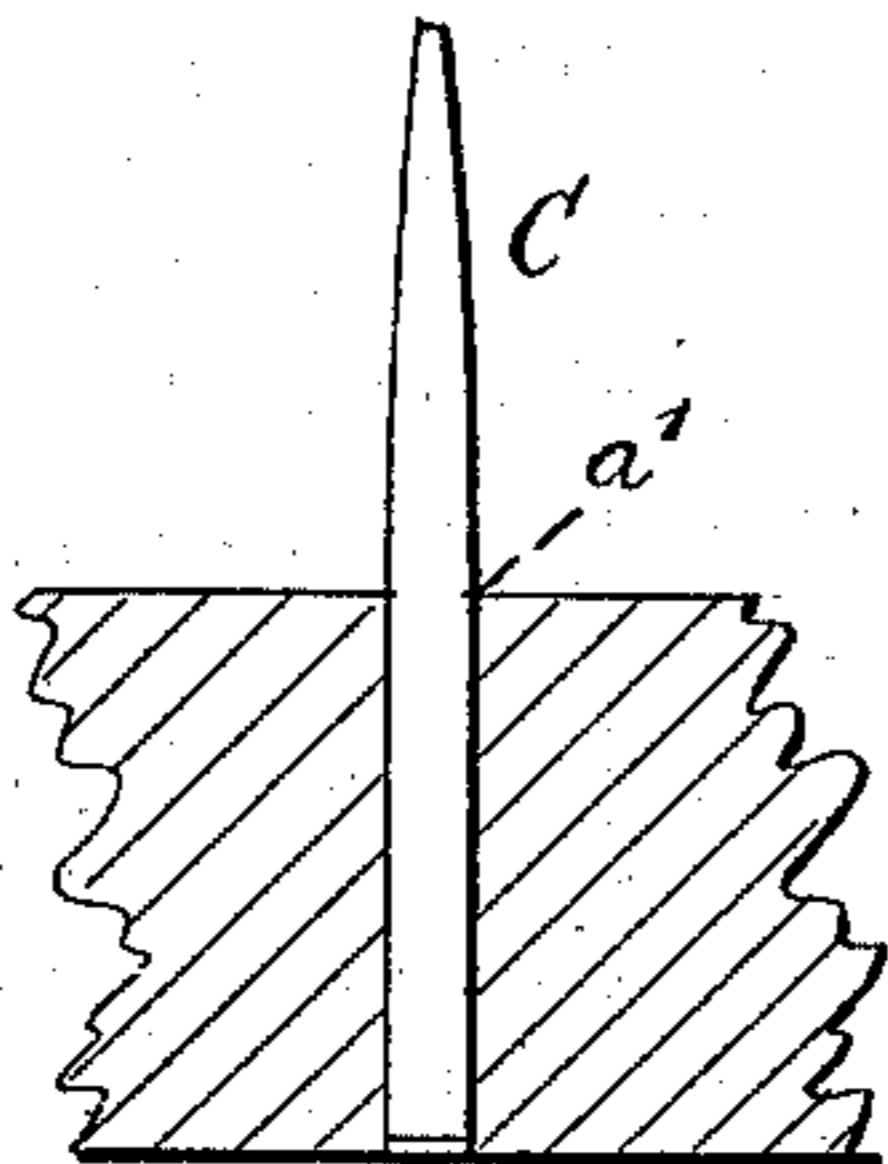


FIG. 3

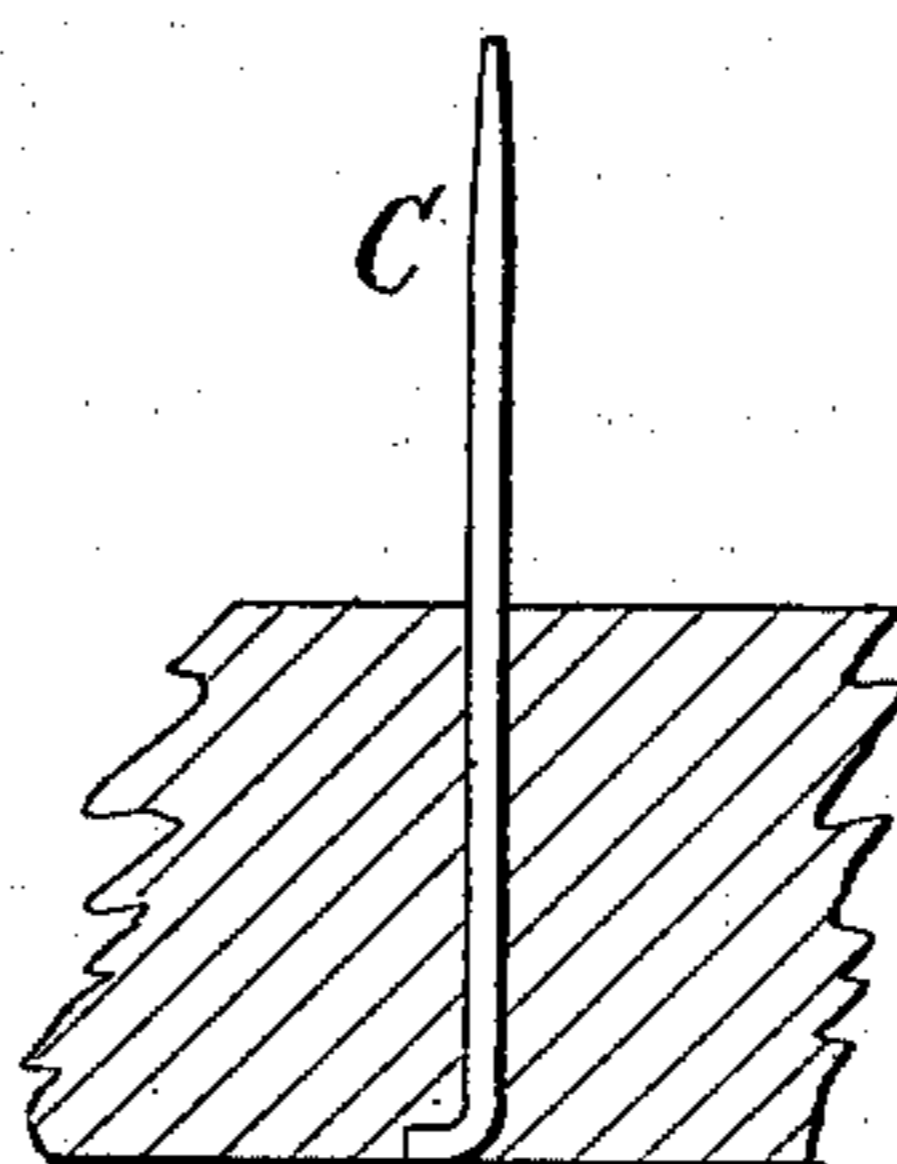


FIG. 4

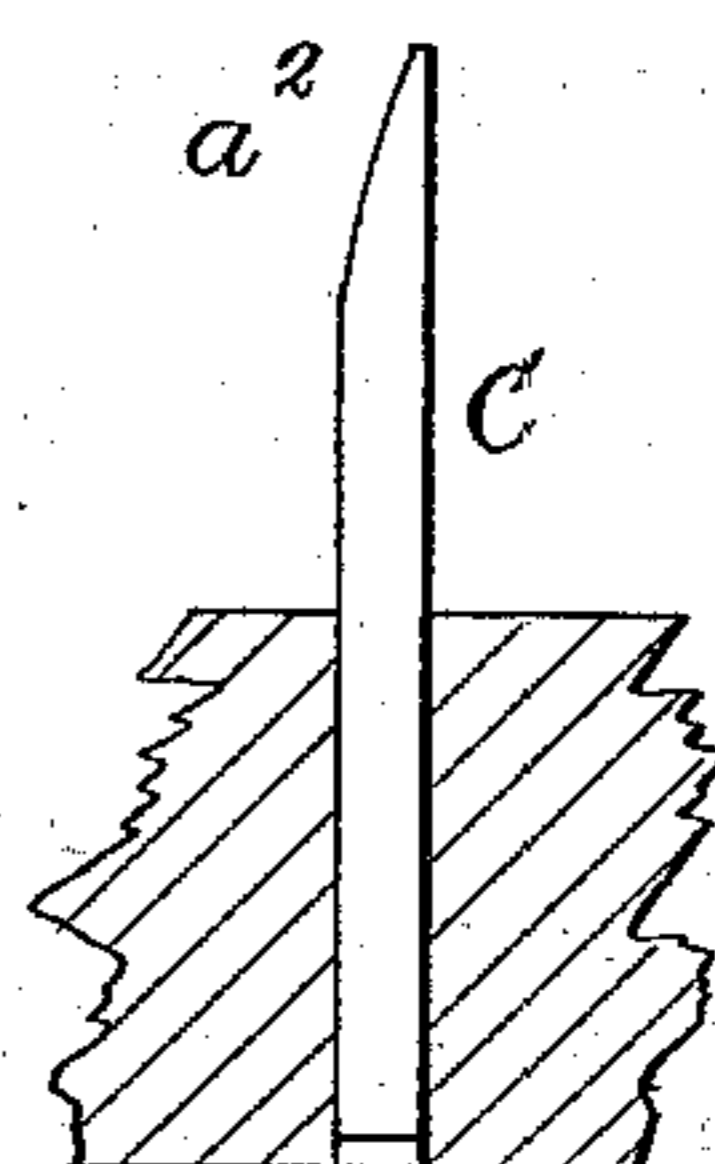


FIG. 5

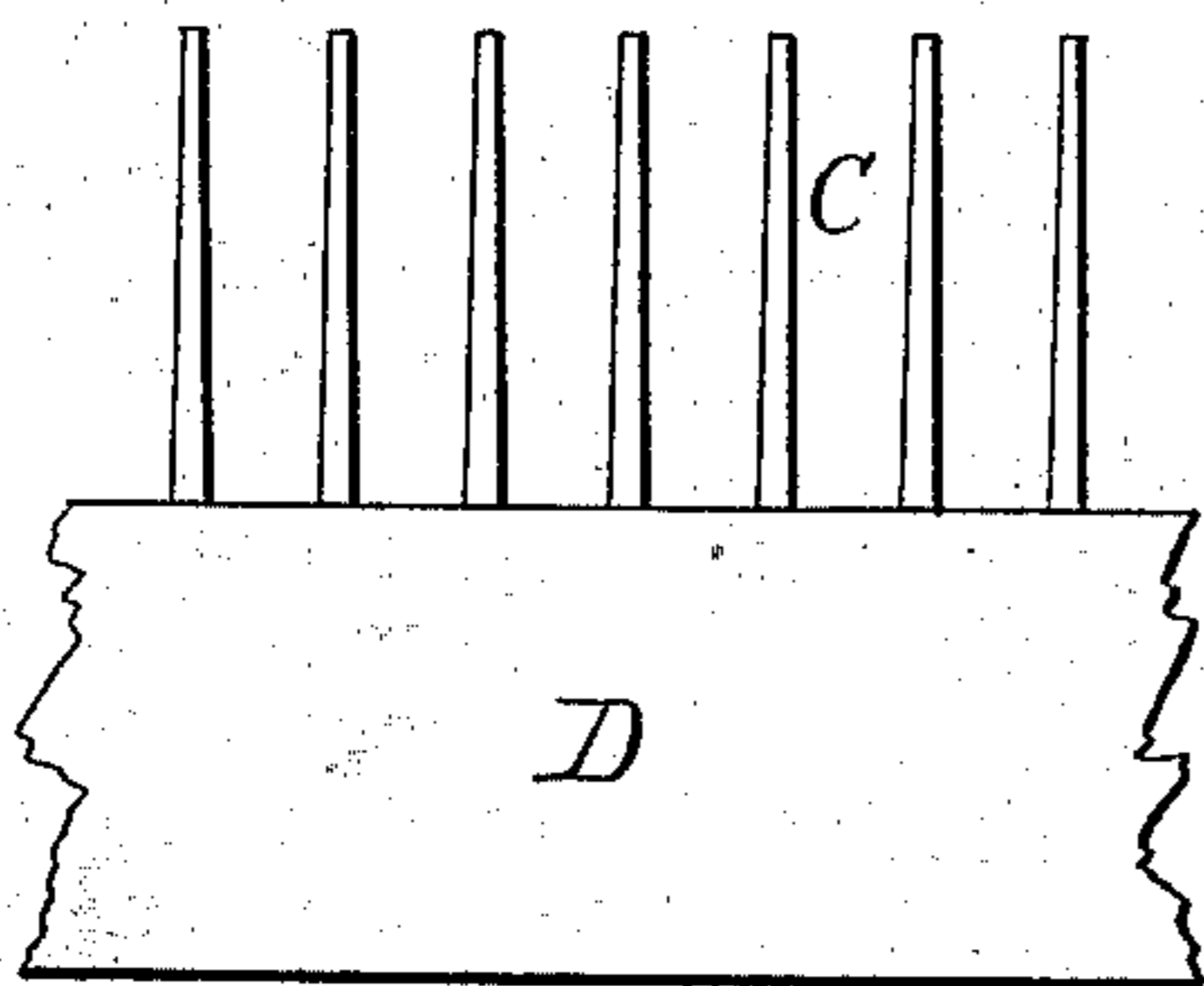


FIG. 6

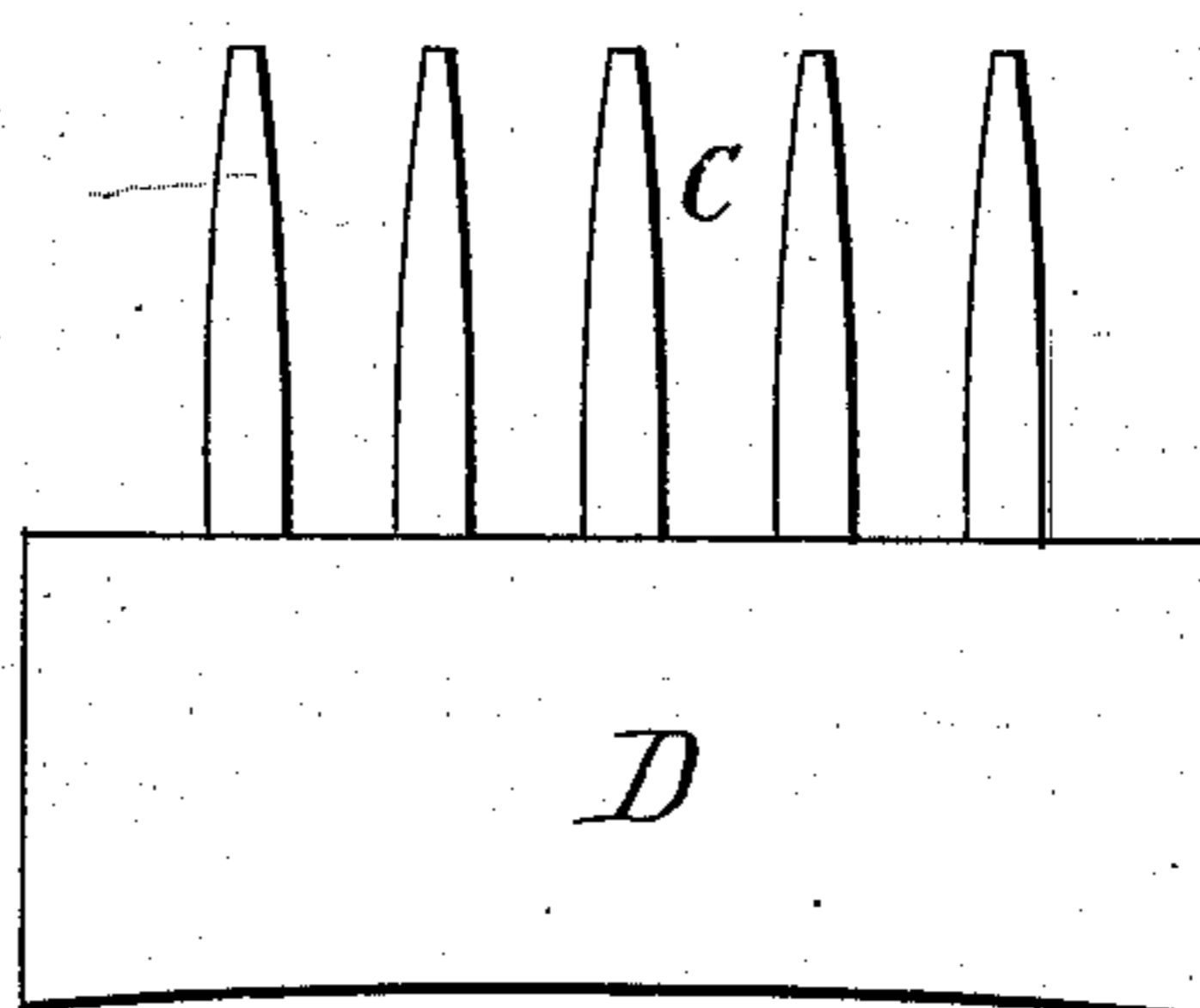
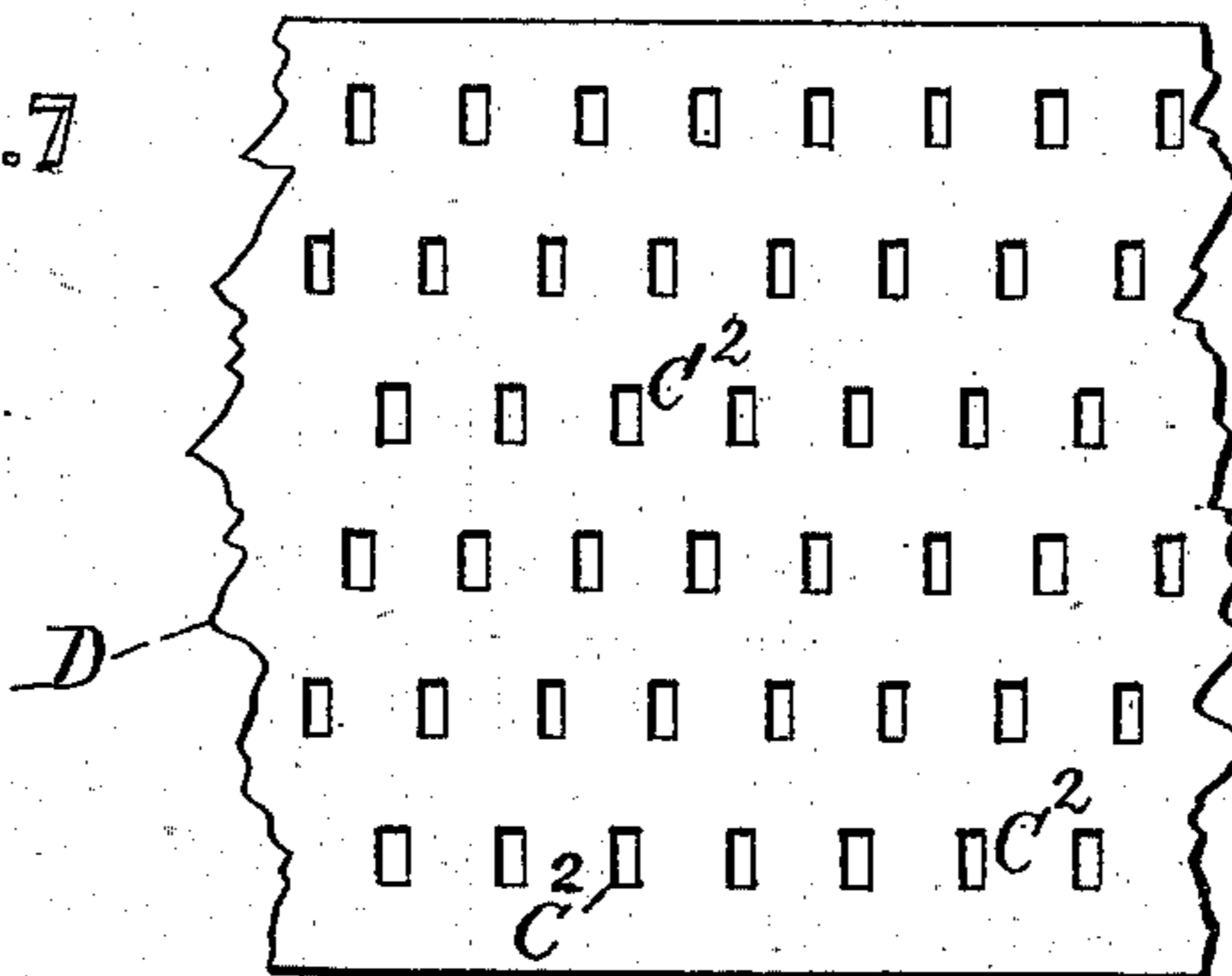


FIG. 7



Witnesses.

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UNITED STATES PATENT OFFICE.

T. WALTER HARDING, OF LEEDS, ENGLAND.

COVERING FOR THE CYLINDERS OF SHODDY AND RAG PICKERS.

SPECIFICATION forming part of Letters Patent No. 268,015, dated November 28, 1882.

Application filed October 16, 1882. (No model.) Patented in England May 15, 1882, No. 2,252.

To all whom it may concern:

Be it known that I, THOMAS WALTER HARDING, a subject of the Queen of Great Britain and Ireland, and residing at Leeds, England, have invented a new and useful Covering for the Cylinders of Shoddy and Rag Pickers and other analogous machines, (for which I applied for a patent in Great Britain, May 15, 1882, No. 2,252,) of which the following is a specification.

My invention relates to the shape of the pins used and the mode of inserting them into the covering. Hitherto these coverings have been made of segments of wood or iron, in which rows of round holes have been suitably bored, into which steel pins or teeth are driven, so as to project an inch, or thereabout. These pins have usually been forged to a round section and tapered, the root end being left square, so as to hold the pins more firmly in the segment and to prevent them flying out by centrifugal action when working. These pins have also been made of round wire suitably tapered, in which case they have usually been provided with nail-heads, or made double in the form of a staple, as described in my patent of June 1, 1879, No. 217,100. In all these cases the pins have, so far as their working part is concerned, been of round section and been driven into round holes in the segments. They have been open to the disadvantage that, being tapered so as to secure strength, they work well while they are new and the small end or point of the pin is engaged, but less and less well as they wear down and the thick or stump end of the pin comes into play.

My invention consists in making the holes in the segment of oval or flattened section, so as to receive pins having flattened sides, which pins present a thin surface to the work on their front edge, but have great strength in the direction of the strain of the work.

In the drawings, Figure 1 shows a front view of a headed and flattened pin tapered slightly at the point. Fig. 2 shows a side view

of the same, wide at the base and the projecting portion tapering upward from the point a' . Fig. 3 shows a front view of a similar pin made of flat wire, the point being slightly tapering. Fig. 4 is a side view of the same, the rear, a^2 , of the point having a sharp slant or taper. Fig. 5 shows a front view of a portion of the lagging or segment fitted with headed flattened pins; and Fig. 6 is a side view of the same. Fig. 7 is a plan of a portion of the lagging, showing the shape of the holes into which the flattened pins are driven.

These pins are produced either from flat wire or sheet-steel cut with a beveled point; or preferably they are made by flattening tapered round wire pins between steel dies. They may either be fitted with a nail or other head, or they may be used in a double or staple form. The elongated holes c^2 in the lags or segments (see Fig. 7) are obtained by first drilling small holes of a diameter equal to the thin side of the pins, and then drifting or punching out these holes to required shape by means already known.

I find that coverings made on this plan perform their work as well when the pins are nearly worn down as when new; that they are much stronger than with pins of round section, and require less power to drive them.

I do not limit myself to the exact section or degree of flattening shown or shape of the head.

I claim—

1. The combination, with the cylinder of a rag-picker or similar waste-tearing machine, of a covering, D, having projecting pins C, with flattened sides and a thin working-edge, as herein described.

2. The combination, with the cylinder of a rag-picker or similar waste-tearing machine, of a covering with elongated holes C^2 cut therein, through which project pins with flattened sides, as herein described.

T. WALTER HARDING.

In presence of—

A. B. CRANE,
R. V. BONNELL.