

(No Model.)

2 Sheets—Sheet 1.

G. SEGSCHNEIDER

MACHINE FOR GRINDING CUTTING BLADES OF PILE WIRES.

No. 551,935.

Patented Dec. 24, 1895.

Fig: 1.

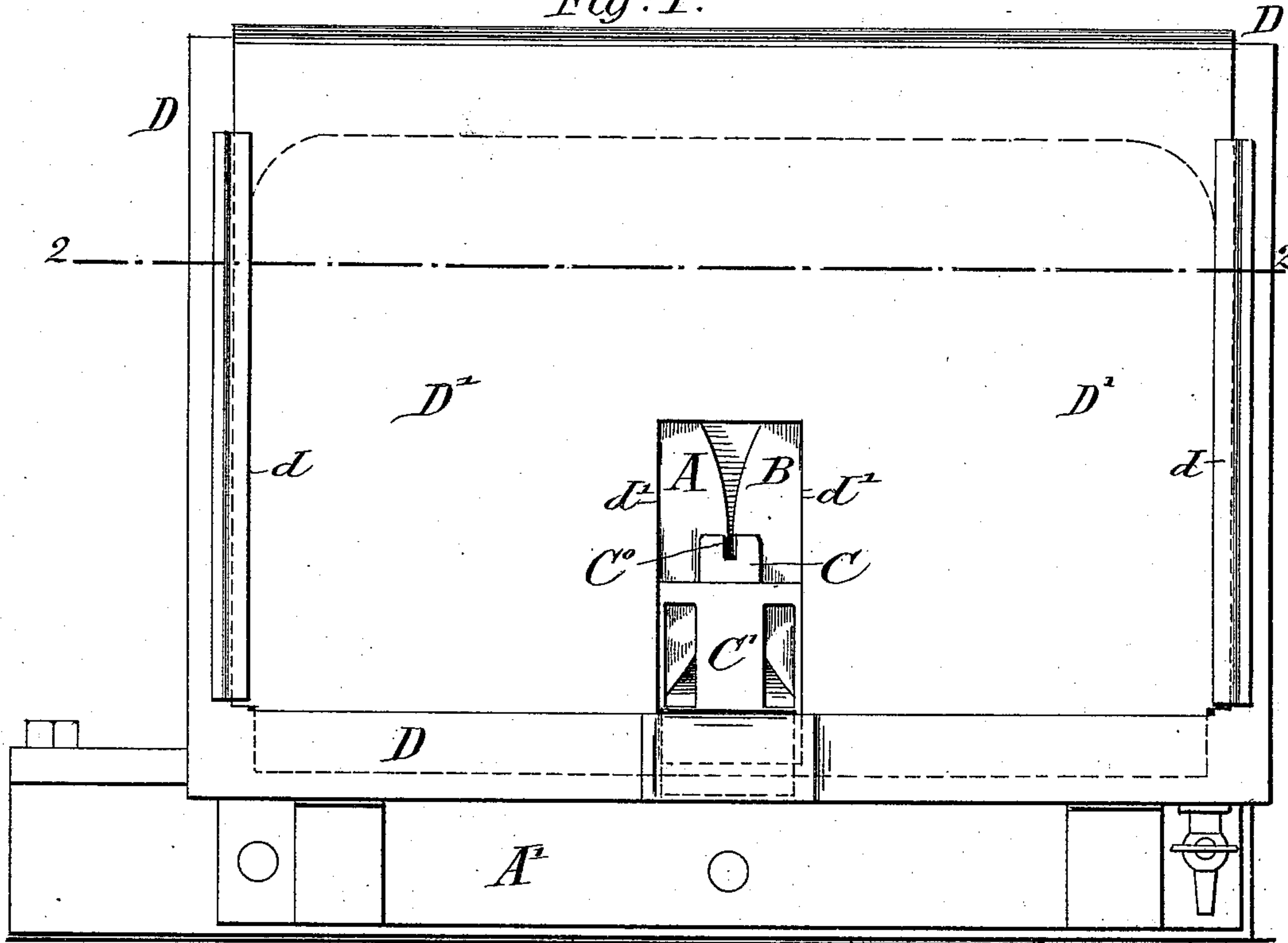
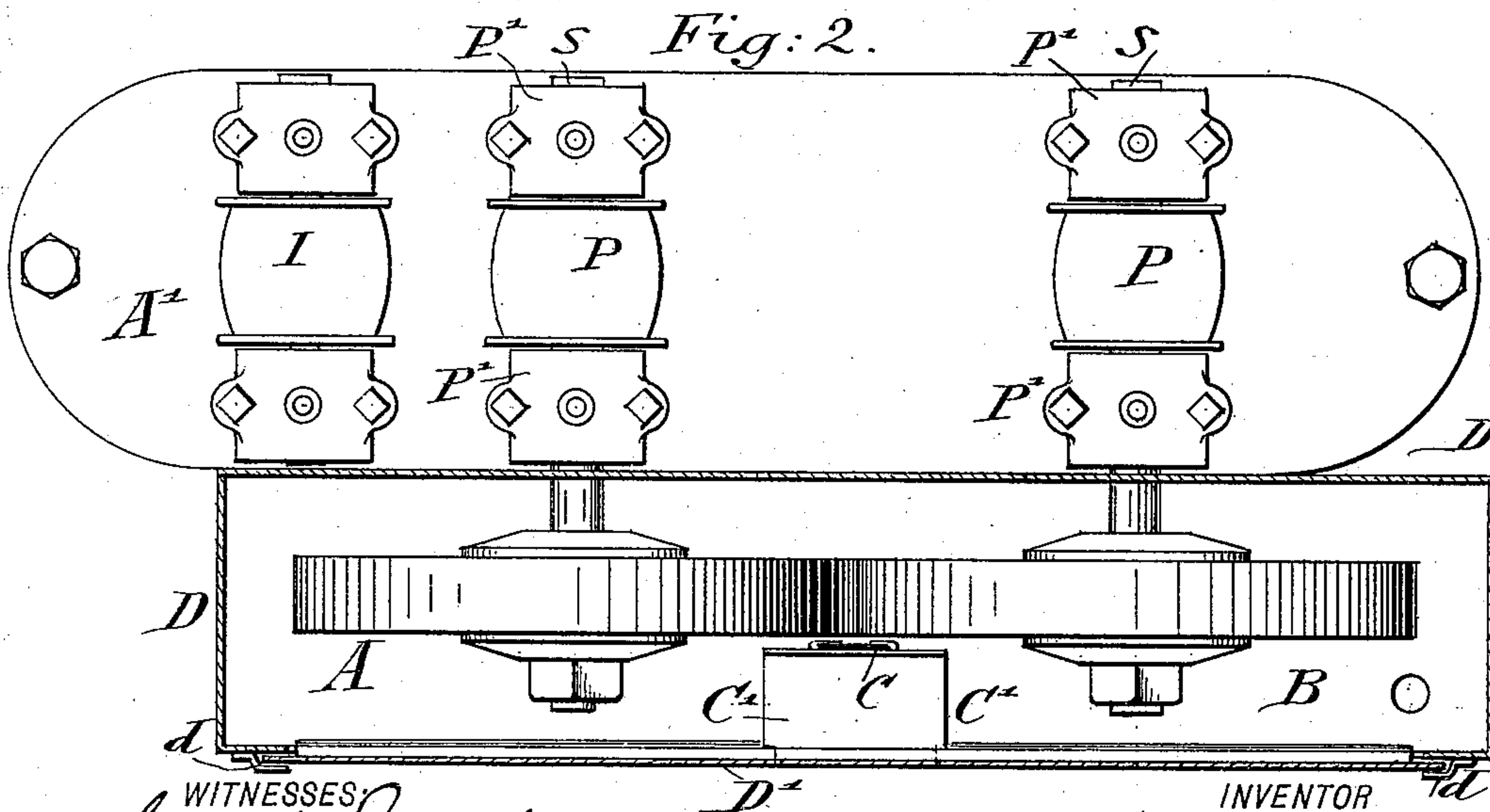


Fig: 2.



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(No Model.)

2 Sheets—Sheet 2.

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MACHINE FOR GRINDING CUTTING BLADES OF PILE WIRES.

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Fig: 3.

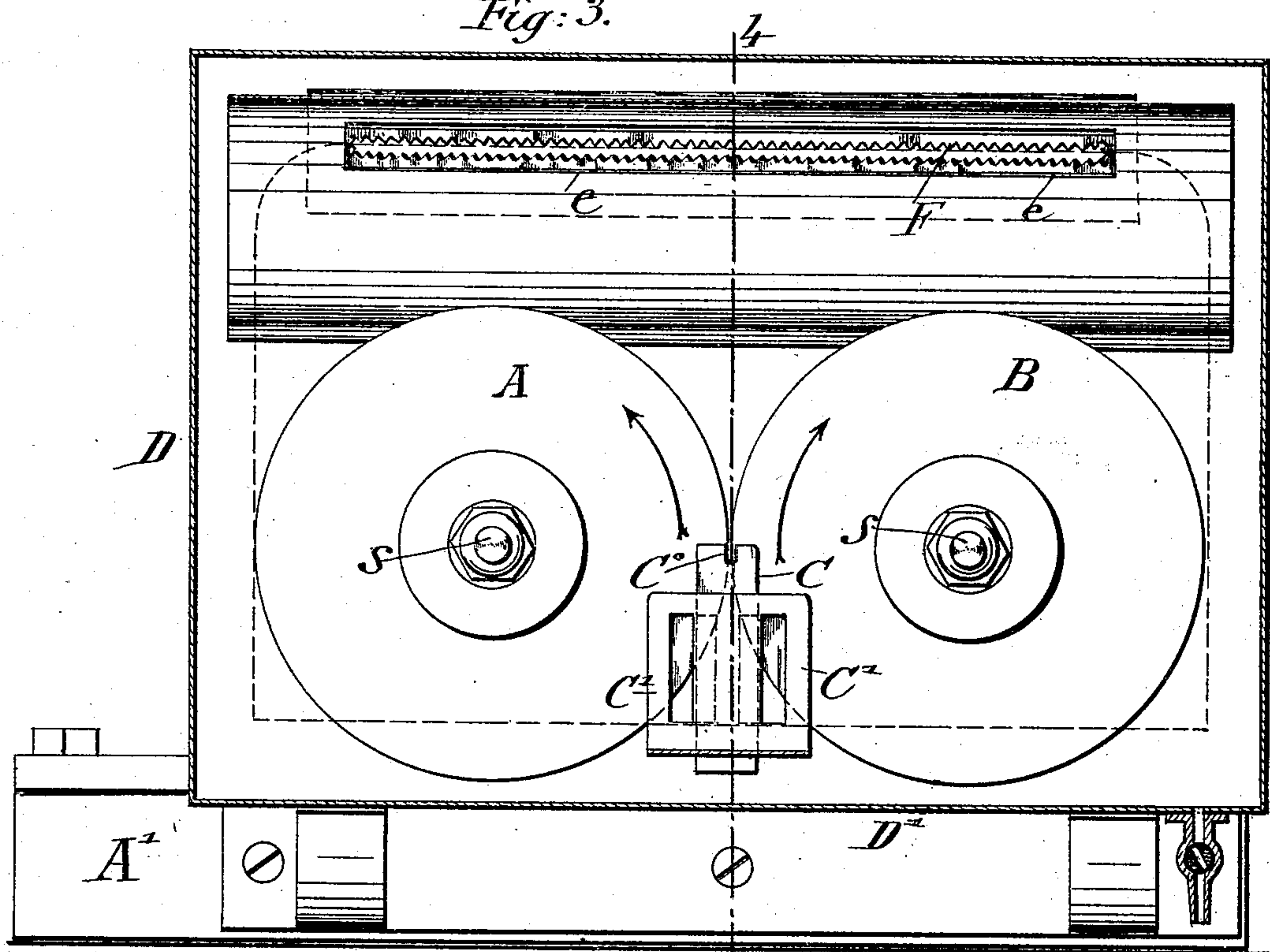
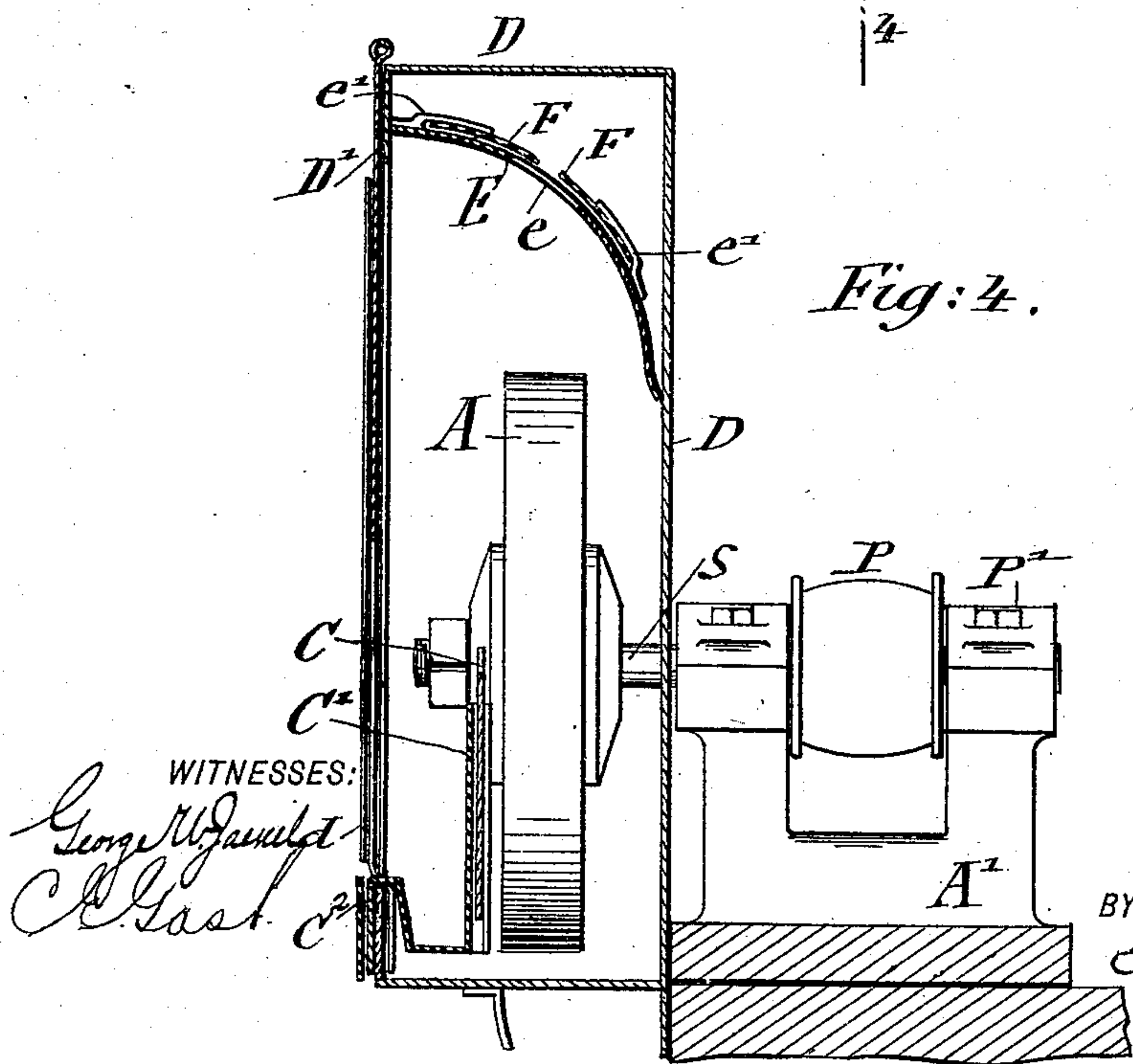


Fig: 4.



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UNITED STATES PATENT OFFICE.

GUSTAV SEGSCHEIDER, OF YONKERS, NEW YORK, ASSIGNOR TO JOHN T. WARING, OF SAME PLACE.

MACHINE FOR GRINDING CUTTING-BLADES OF PILE-WIRES.

SPECIFICATION forming part of Letters Patent No. 551,935, dated December 24, 1895.

Application filed June 14, 1895. Serial No. 552,853. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV SEGSCHEIDER, a citizen of the United States, residing at Yonkers, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Machines for Grinding the Cutting-Blades of Pile-Wires, of which the following is a specification.

This invention has reference to an improved machine for quickly and reliably sharpening the cutting-blades of the pile-wires of looms for making pile fabrics, which blades have to be frequently sharpened and placed in the pile-wire; and the invention consists of a machine for grinding the said cutting-blades, which comprises two rotary grinding-disks, an adjustable support for the pile-wire located near the point of greatest proximity of the grinding-disks, and an inclosing box or casing provided with means for collecting the oil supplied to the grinding-disks, as will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a front elevation of my improved machine for grinding the cutting-blades of pile-wires for looms. Fig. 2 is a plan view of Fig. 1, partly in horizontal section, on line 2-2, Fig. 1. Fig. 3 is a front elevation of the grinding-machine, partly in section, through the inclosing box, showing the interior construction of the same; and Fig. 4 is a vertical transverse section on line 4-4, Fig. 3.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A B represent two grinding-disks which are made of emery or other abrading material and which are rotated nearly in contact with each other by a belt (not shown) that passes over pulleys P P on the shafts S S of said disks, said shafts rotating in suitable bearings P' mounted on the base A' and provided with necessary lubricating devices, so that the grinding-disks can be rotated at high speed.

An idle-pulley I is provided for keeping the driving-belt of the pulleys taut, as shown clearly in Fig. 2.

In front of the grinding-disks A B, at the middle of a horizontal line connecting the axes of their shafts, is arranged a suitable notched

blade-support C, on which the outer end of the cutting-blade is supported, said blade being inserted in the notch C⁰, with the edge to be sharpened in downward direction, so that the grinding-disks sharpen the same uniformly at both sides owing to their rapid rotation. The support C is vertically adjustable in a frame C', that is attached to the lower part of the inclosing box or casing D, which is preferably made of sheet metal and provided at its front part with a removable slide D', that is retained by vertically-guided ways d at opposite sides of the inclosing box D. The supporting-frame C' for the blade-support is attached by a hook-shaped portion C² to the lower front part of the inclosing box.

The inclosing box D is provided at its upper part with a curved guard-plate E, that extends from the front wall of the box to the back of the same, and which is provided with a longitudinal opening e, into which project serrated or scalloped felt strips F that are retained by suitable keepers e' at the upper part of the curved guard-plate E. The felt strips F, located at the opening of the guard-plate E, serve for collecting the oil that is splattered by the rapidly-rotating grinding-disks and returning it to the bottom of the inclosing box, so as to reconduct it to the grinding-disks from time to time until it becomes thickened and dirty; but the same quantity of oil may be used for a considerable length of time for grinding the disks. An opening d' in the slide D' serves for giving access to the blade-support C and the grinding-disks A and B without injuring the fingers or soiling the hands by the oils applied to the grinding-disks. The shaft-bearings and the inclosing box are supported on a strong base-plate A', which is attached to a suitable support.

The advantages of my improved machine for grinding the cutting-blades of pile-wires are, first, that the blades may be quickly and uniformly ground; secondly, that large quantities can be ground within a given time, so that the time consumed and the uneven grinding of the blades by hand are dispensed with; thirdly, that the machine being provided with guard devices and an inclosing box cannot injure the hands even of the most careless workman, and, lastly, that the entire ma-

chine is operated with a greatly reduced and considerably economical quantity of oil.

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

1. A machine for grinding the cutting-blades of pile-wires, consisting of two rotary grinding-disks, a blade-support located at the faces of the disks and terminating at its upper end near the point of greatest proximity
10 of the disks, and an inclosing box having a removable front wall and provided with an opening in said wall, for enabling the insertion of the cutting-blades, and with means for
15 collecting the spattered oil and conducting it back to the lower part of the inclosing-box, substantially as set forth.

2. A machine for grinding the cutting-blades of pile-wires, consisting of two rotary grinding-disks, a blade-support located near
20 the point of greatest proximity of the disks, an inclosing-box having an opening in its front wall and provided with a curved guard-plate at its upper part having an opening, and oil absorbent strips projecting into said open-
25 ing, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAV SEGSCHNEIDER.

Witnesses:

PAUL GOEPEL,
GEORGE W. JAEKEL.