

No. 677,444.

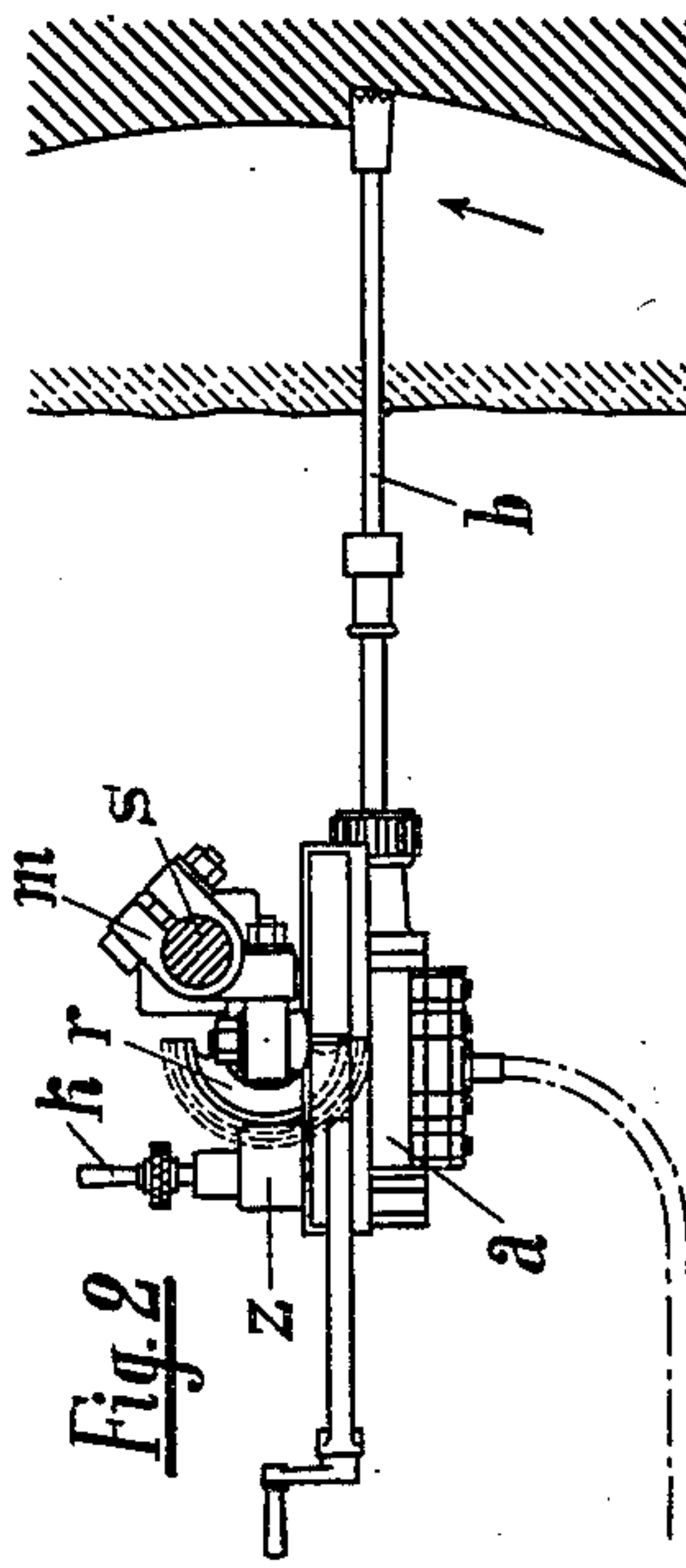
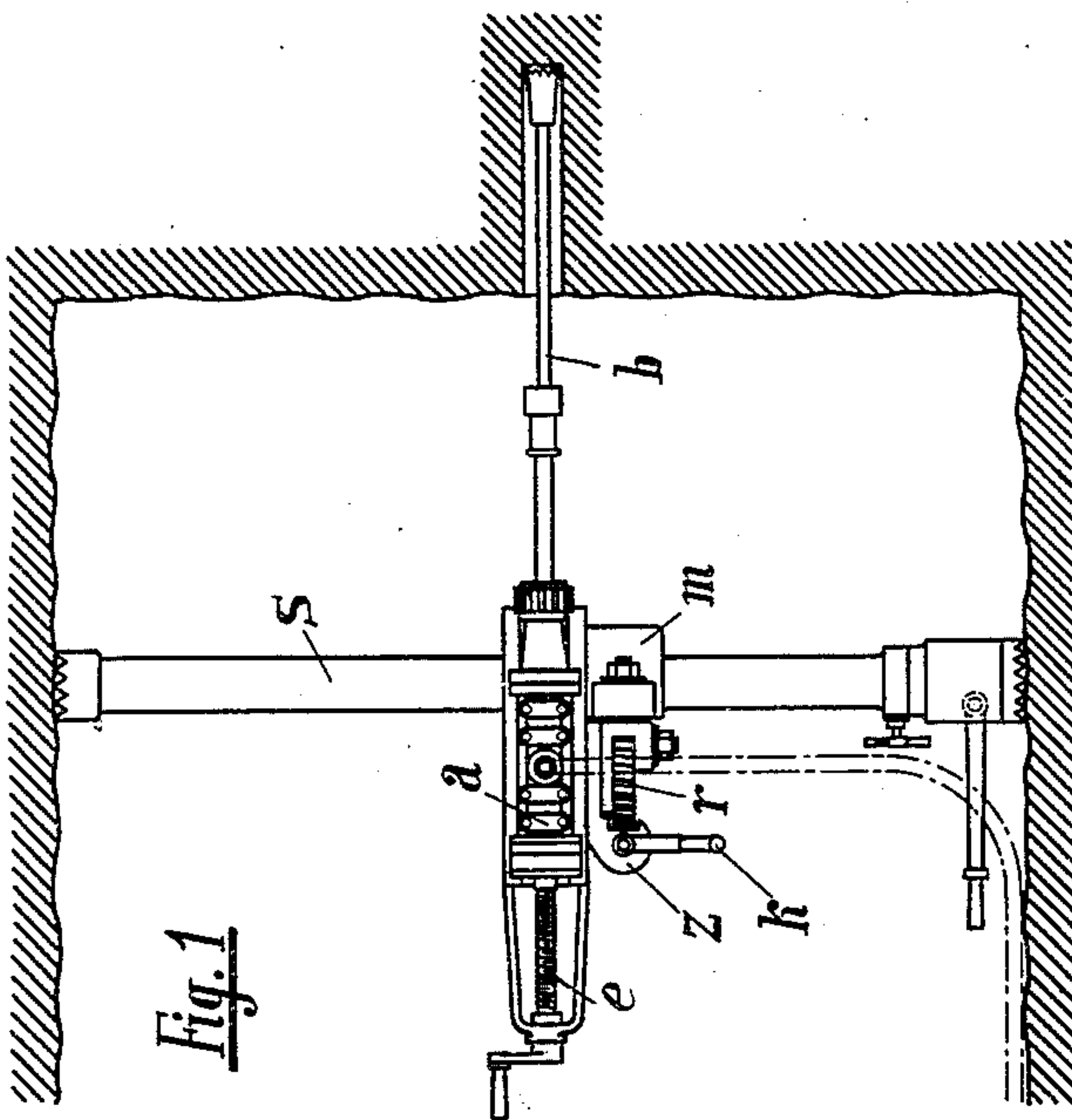
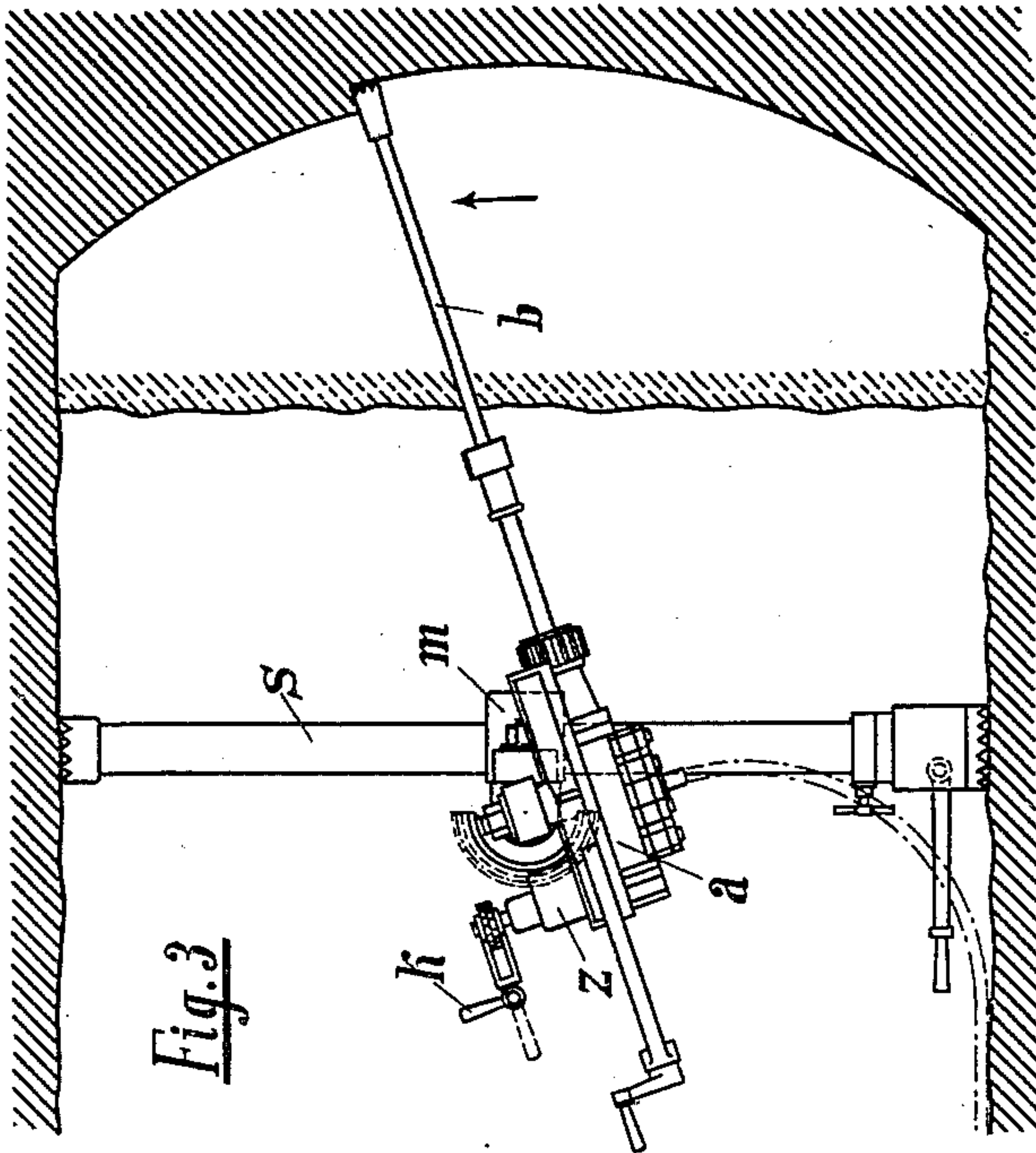
Patented July 2, 1901.

F. EISENBEIS & F. GARELLY, JR.
STONE CUTTING MACHINE.

(Application filed Oct. 15, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:

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Fig. 4.

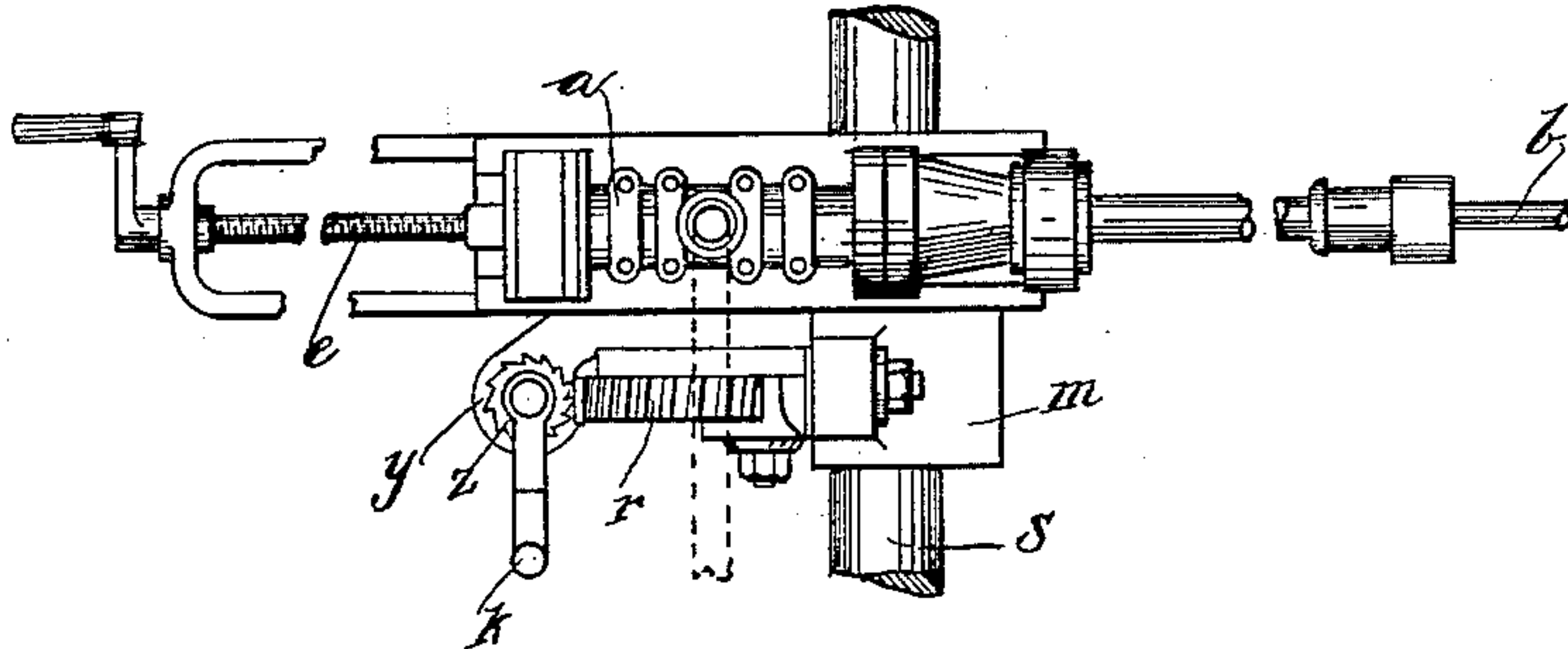


Fig. 5.

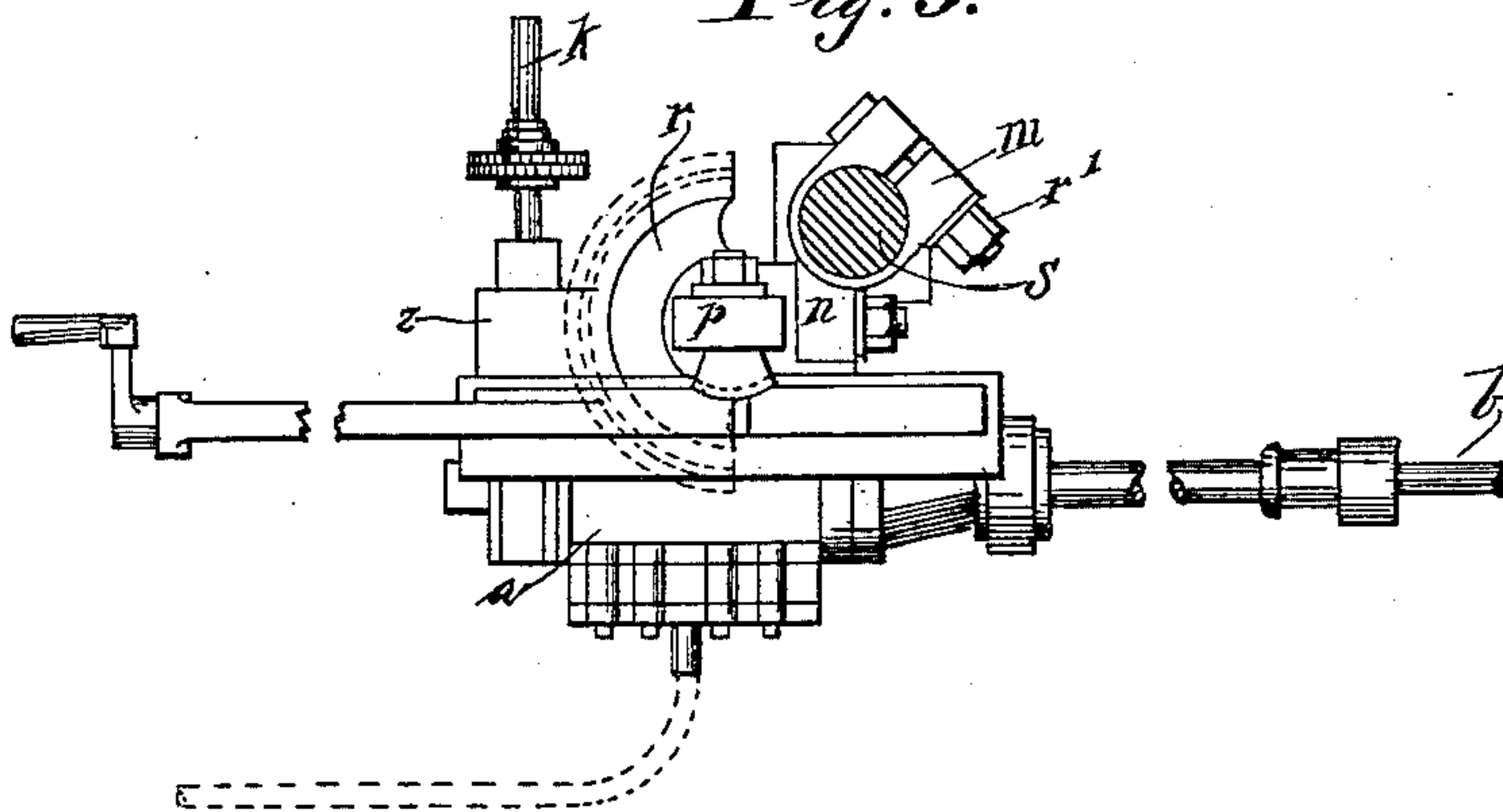


Fig. 6.

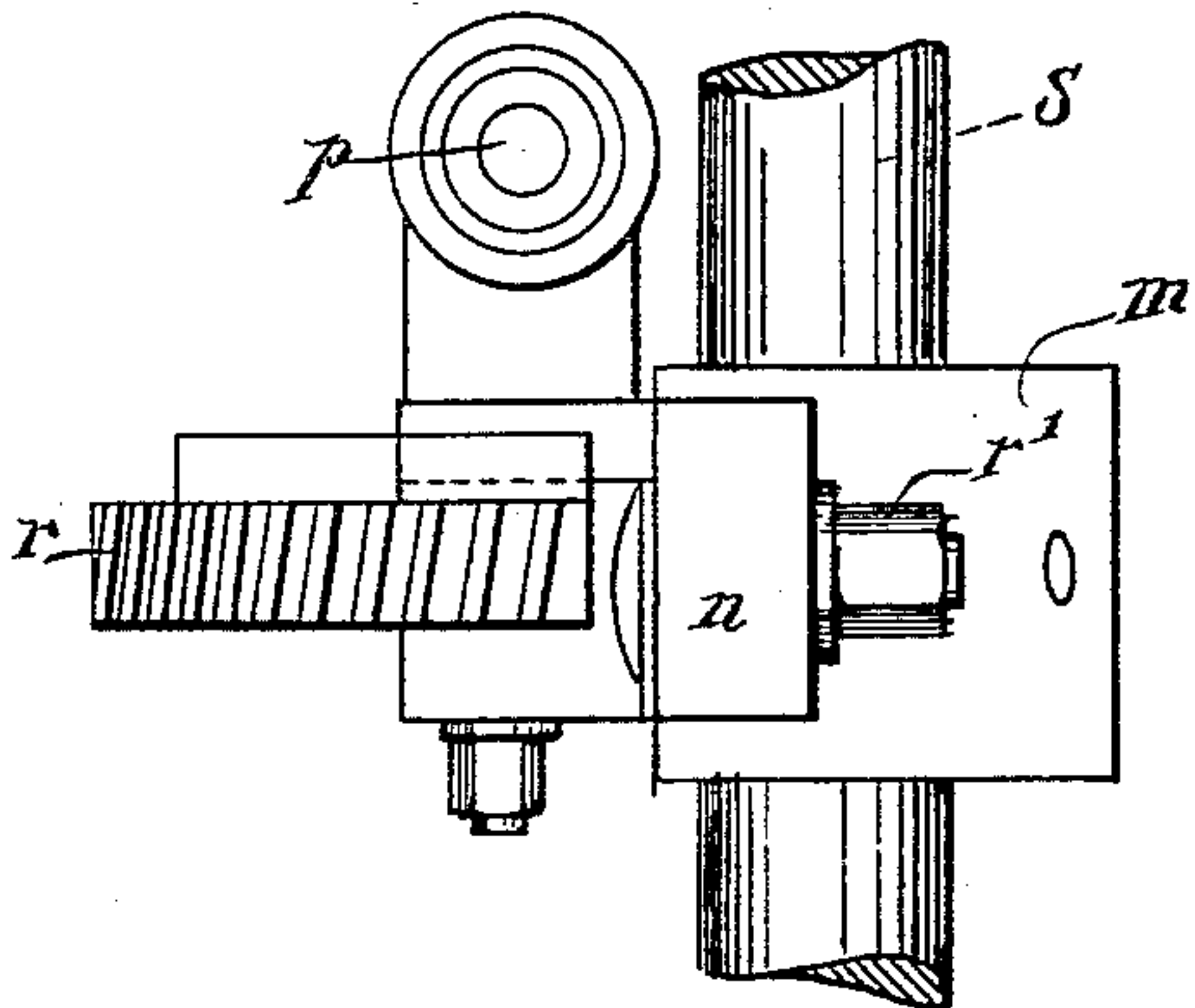
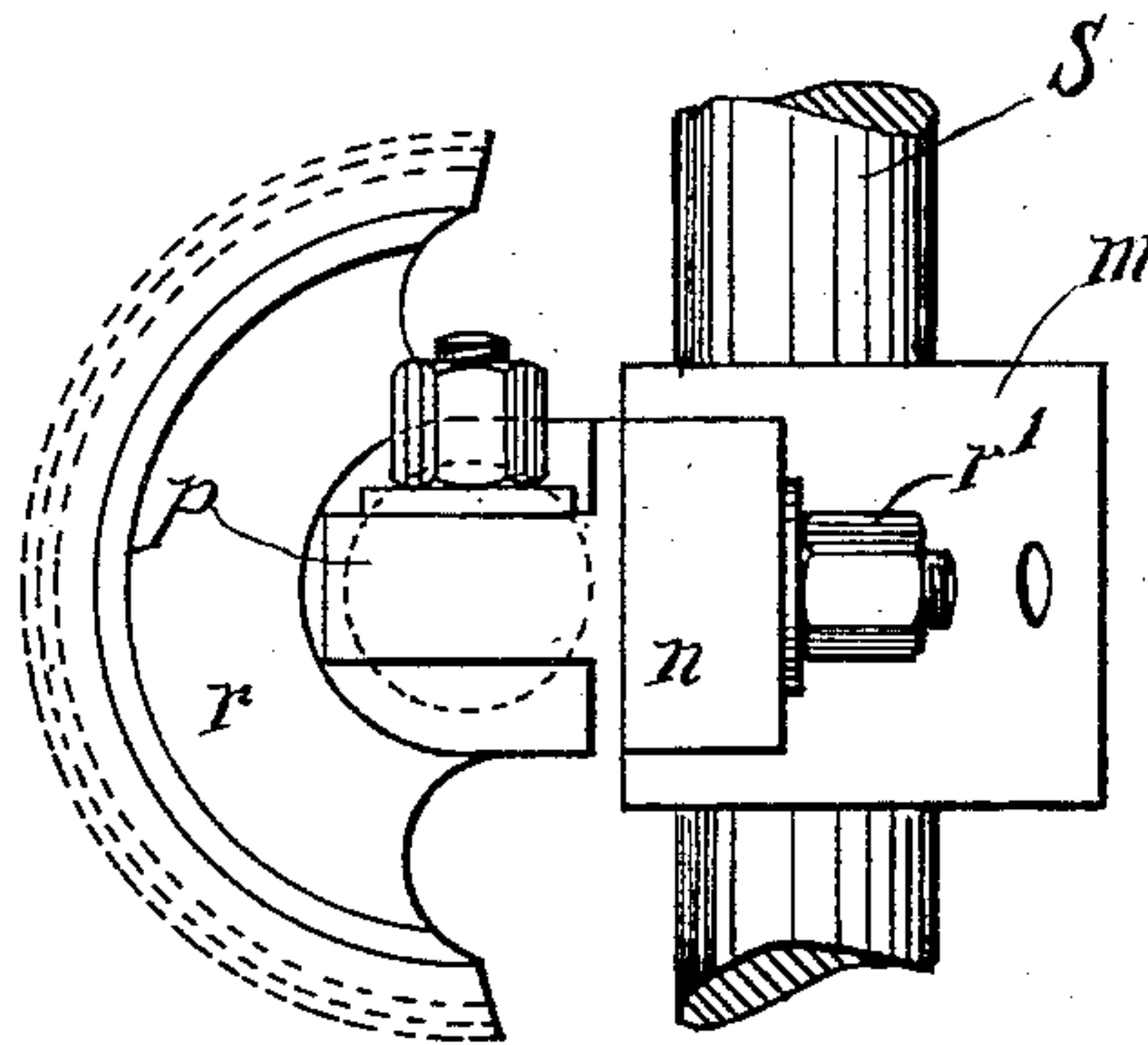


Fig. 7.



UNITED STATES PATENT OFFICE.

FRITZ EISENBEIS, OF WELLESWEILER, AND FERDINAND GARELLY, JR., OF
SAARBRÜCKEN, GERMANY.

STONE-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 677,444, dated July 2, 1901.

Application filed October 15, 1900. Serial No. 33,138. (No model.)

To all whom it may concern:

Be it known that we, FRITZ EISENBEIS, a resident of Wellesweiler, and FERDINAND GARELLY, Jr., a resident of Saarbrücken, Germany, subjects of the German Emperor, have invented certain new and useful Improvements in Stone-Cutting Machines, of which the following is a specification.

The object of our present invention is to provide an improved stone-cutting machine whereby rock or stone may be bored as well as cut horizontally and vertically and which may be very advantageously employed as a substitute for the special very complicated machines heretofore employed for this purpose.

The invention consists in the construction and novel combination of parts fully described and claimed hereinafter.

In the accompanying drawings, Figure 1 is a side elevation of the improved machine set up for cutting rock horizontally; Fig. 2, a corresponding plan view. Fig. 3 shows a view similar to Fig. 1, the machine being employed for cutting rock vertically. Fig. 4 is a side elevation, enlarged and partly broken away, of the machine as shown in Fig. 1; and Fig. 5 is a corresponding plan view. Figs. 6 and 7 are enlarged details.

Like letters refer to like parts throughout all the views.

In the drawings, *s* represents the ordinary vertical supporting standard or column, on which is mounted an adjustable sleeve *m*, provided with an eye *n*, in which is arranged the toothed segment *r*, which may be rocked in said eye or bearing *n* from a horizontal to a vertical plane or through an arc of ninety degrees and fixed in either position or any intermediate position by means of the clamping-nut *r'* shown in the various figures. Rotatably arranged in the hub of the segment, at the axis of said segment and extending laterally therefrom at right angles to its plane, is a connecting-piece *p*, to which is

secured in the well-known way the drilling-machine *a* of well-known construction. Said machine is provided with an outsetting lug *y*, in which is journaled an endless screw *z*, meshing with the toothed segment *r*. When screw *z* is rotated, the segment being in the position shown in Figs. 1 and 2—that is, horizontal—the machine will be moved horizontally for making a horizontal cut. The cut may be made at any desired height by adjusting the sleeve *m* up or down.

When it is desired to make a vertical cut, all that is necessary to do is to rock the toothed segment *r* in its bearing *n* to an angle of ninety degrees and to lock it in this position; (shown in Figs. 3 and 5,) whereby the drilling-machine is moved correspondingly. As in the lowermost position of the drill-shaft *b* the crank cannot freely pass at the supporting-column; said crank is preferably formed like a ratchet-drill.

Having fully described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination with a rock-drilling machine, of a suitable support, a sleeve adjustable longitudinally on said support, a toothed segment carried in a bearing on said sleeve and capable of being rocked from a horizontal to a vertical plane or any intermediate position, in said bearing, a connecting-piece pivoted in the hub of said segment at the axis thereof and extending laterally therefrom, to which connecting-piece said drilling-machine is secured, and an adjusting device carried by the drilling-machine and in constant engagement with the segment in whatever plane the latter is placed.

In testimony whereof we have hereunto set our hands in presence of two witnesses.

FRITZ EISENBEIS.

FERDINAND GARELLY, JUNIOR.

Witnesses:

JEAN GRUND,

CARL GRUND.