

No. 655,044.

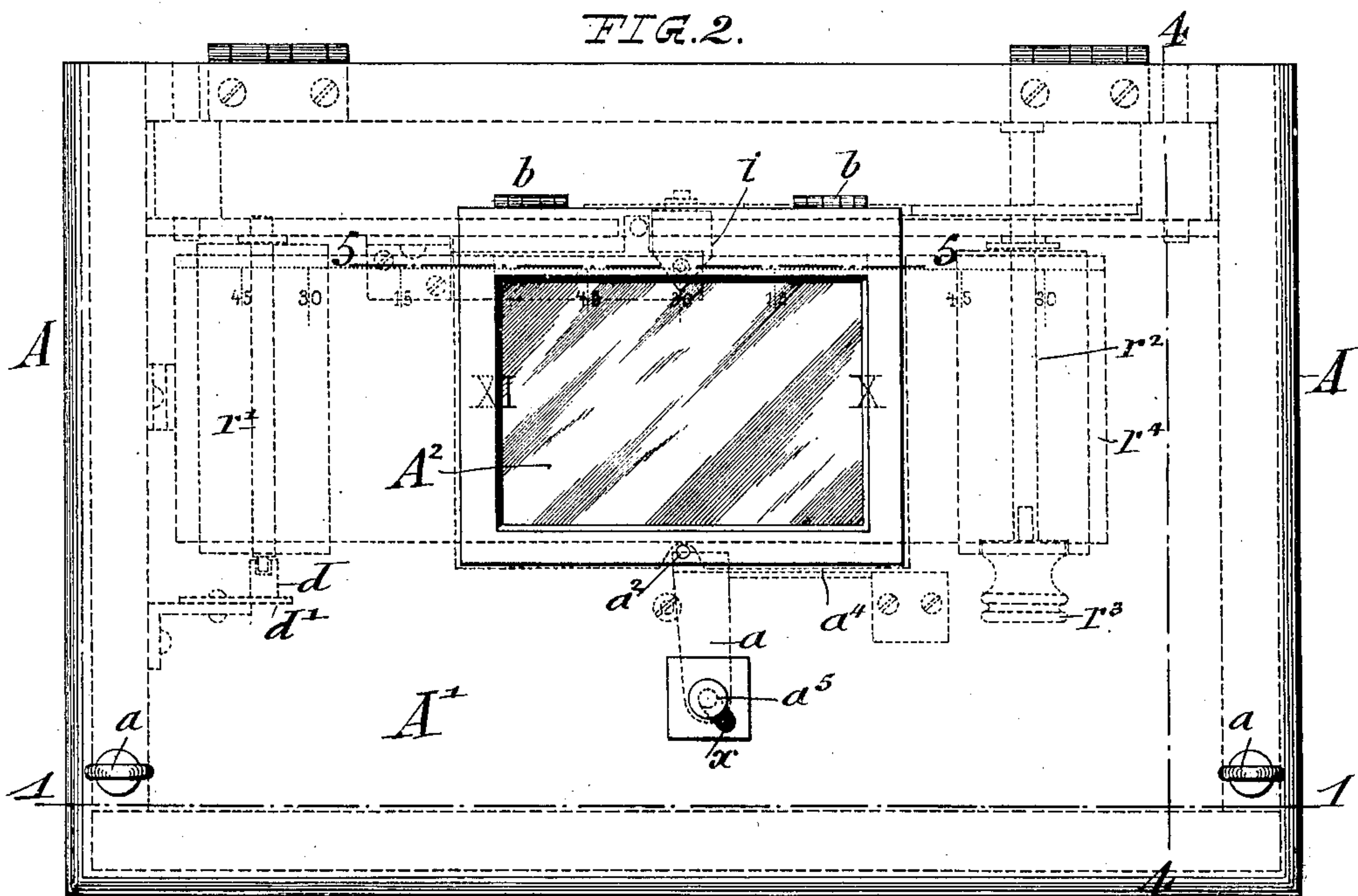
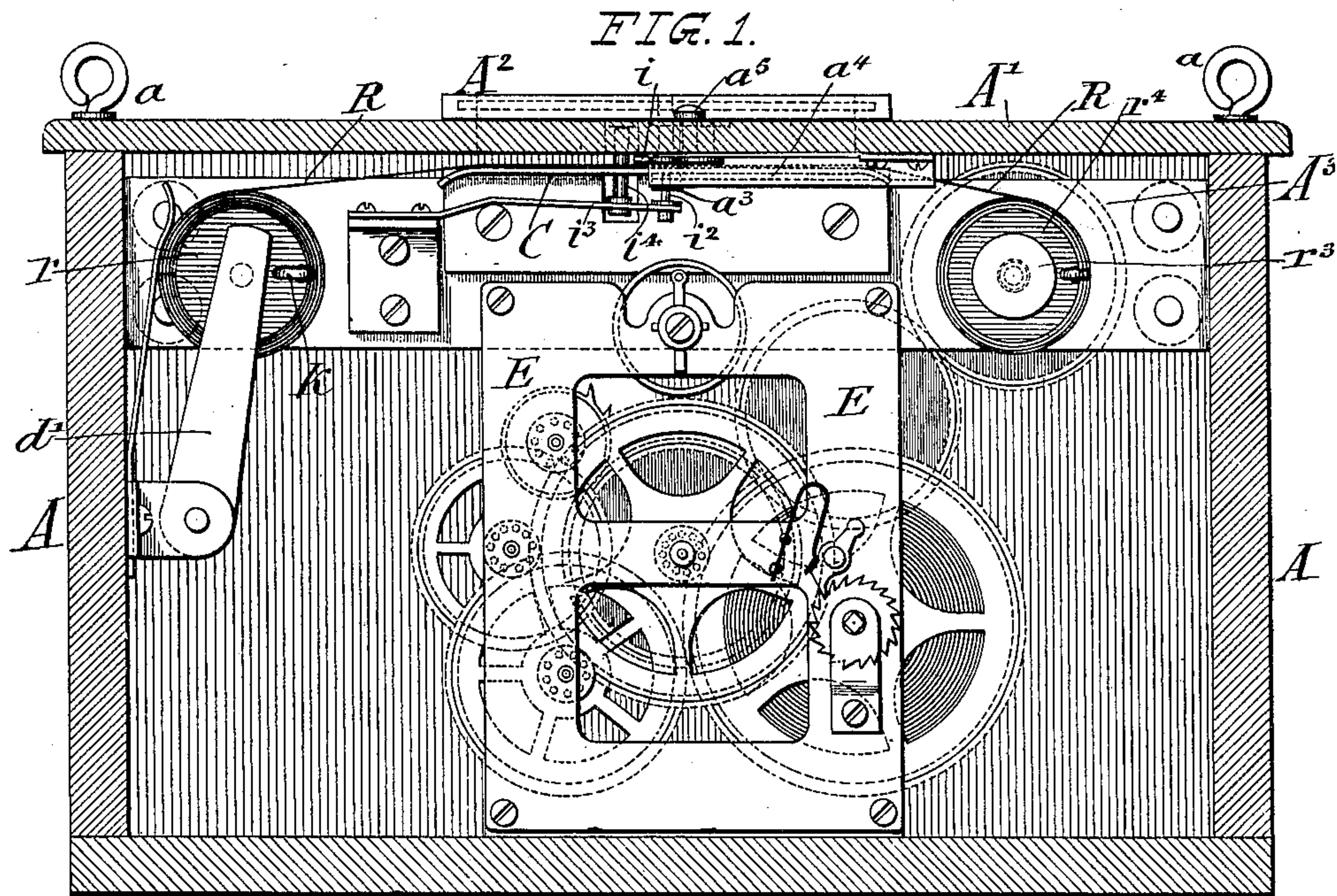
Patented July 31, 1900.

A. AUF DER HEYDE.
WORKMAN'S TIME RECORDER.

(Application filed Sept. 23, 1899.)

(No Model.)

3 Sheets—Sheet 1.



WITNESSES:

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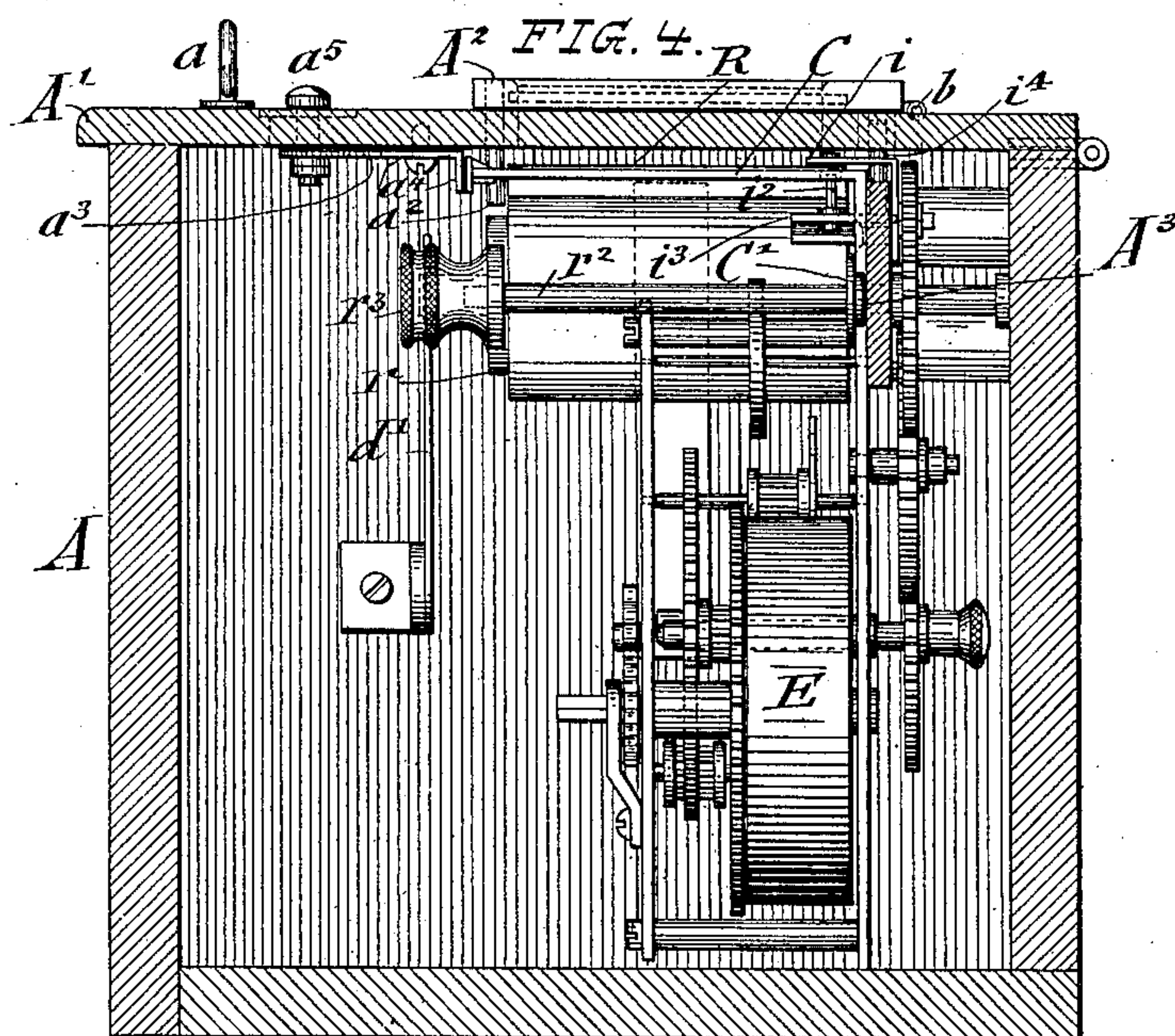
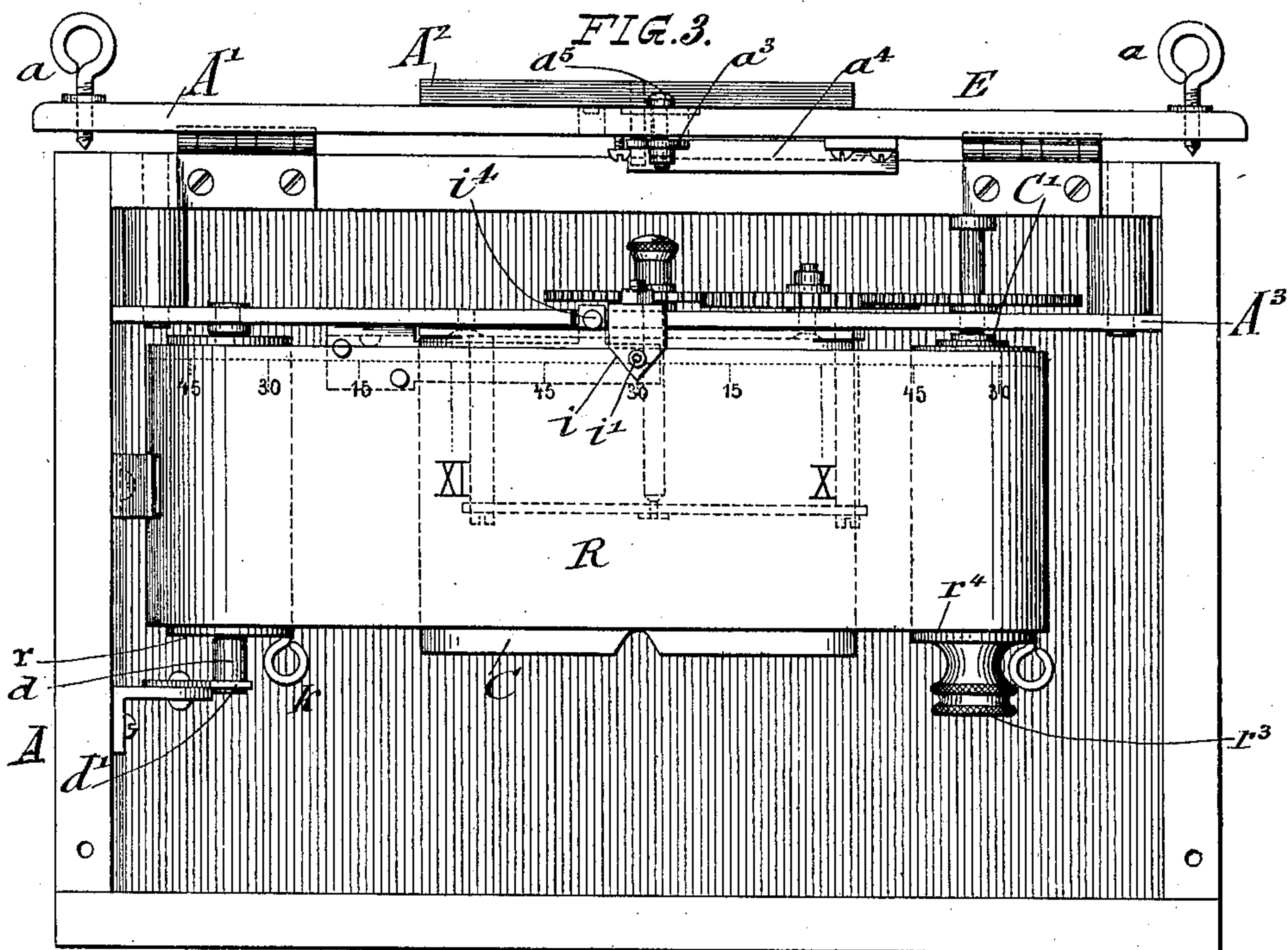
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3 Sheets—Sheet 2.



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FIG. 5.

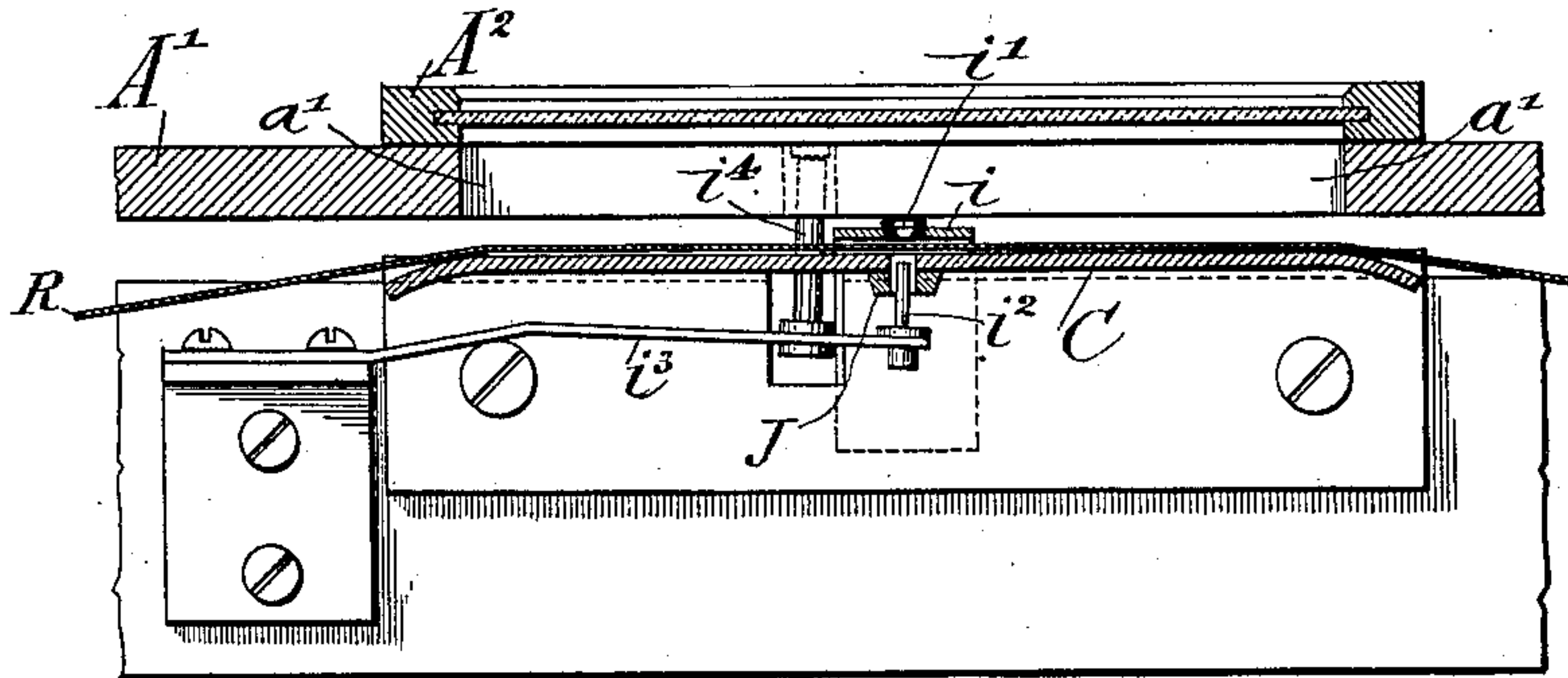


FIG. 6.

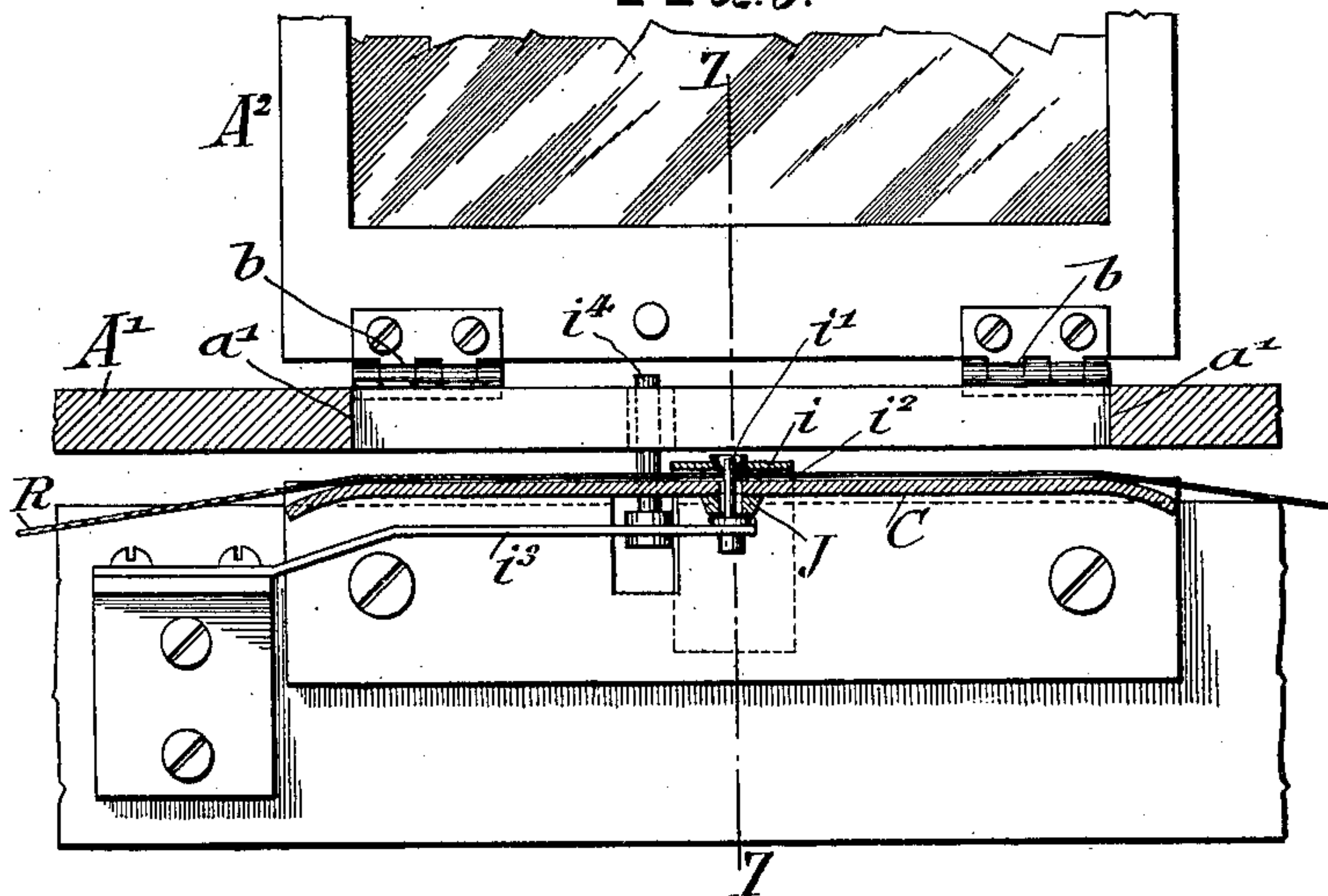
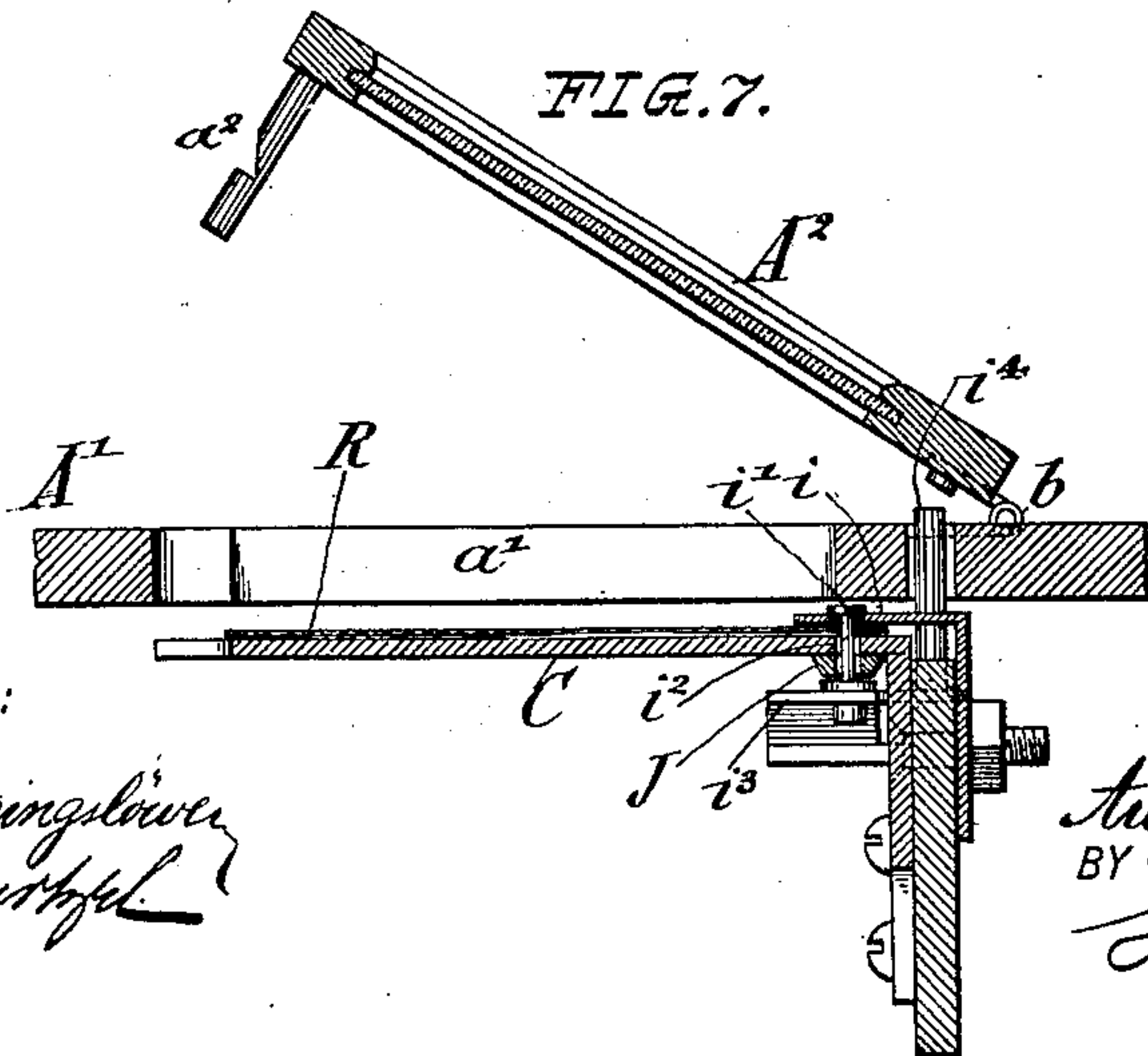


FIG. 7.



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UNITED STATES PATENT OFFICE.

AUGUST AUF DER HEYDE, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF
ONE-HALF TO WILLIAM HOFFMAN, OF NEW YORK, N. Y.

WORKMAN'S TIME-RECORDER.

SPECIFICATION forming part of Letters Patent No. 655,044, dated July 31, 1900.

Application filed September 23, 1899. Serial No. 731,386. (No model.)

To all whom it may concern:

Be it known that I, AUGUST AUF DER HEYDE, a citizen of the Empire of Germany, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Watchmen's Time-Recorders, of which the following is a specification.

This invention relates to an improved apparatus of that class which are used for recording and controlling the time of watchmen, so that they are held to the reliable performance of their duties, said recording apparatus indicating the time on a movable strip operated by a clock-train and said strip being adapted to receive the signature of the watchman at the time recorded.

The invention consists of an improved watchman's time-recorder that comprises a graduated record-strip, means for moving the same forward, a stationary table over which the record-strip is guided, a punch for perforating the record-strip, a hinged door, means between the door and punch that causes the actuation of the punch on the opening of the cover and which releases the same on the door being closed again, and means for fastening the door down so as to retain the punch out of contact with said strip; and the invention consists, further, of certain details of construction and combinations of parts, which will be fully described hereinafter and finally pointed out in the claim.

In the accompanying drawings, Figure 1 is a front elevation of my improved watchman's time-recorder, partly in section through the casing, on line 1 1, Fig. 2. Fig. 2 is a plan view of the same. Fig. 3 is also a plan view of my improved apparatus with the top plate in open position and showing the parts below the same. Fig. 4 is a vertical transverse section on line 4 4, Fig. 2. Figs. 5 and 6 are detail vertical longitudinal sections drawn on line 5 5, Fig. 2, showing the marking parts, respectively, in position when not marking and in position for marking on the record-strip; and Fig. 7 is a detail vertical transverse section on line 7 7, Fig. 6.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the

casing of my improved watchman's time-recorder, which is made of wood or other suitable material and provided with a hinged top plate A', which is held in closed position by means of fastening-screws *aa*. The top plate A' is provided with an opening *a'*, which is closed by means of a door A², that is hinged to the top plate A' at *b b* and locked to the same by means of a recessed pin *a*² thereon, which is engaged by an L-shaped spring-catch *a*³, arranged on the top plate. The catch *a*³ is actuated by a flat spring *a*⁴ and is provided with a button *a*⁵, the shank of which passes through a slot *x* in the top plate A'. When the button *a*⁵ is pushed backward in the slot *x*, the recessed locking-pin *a*² of the door A² is released, so that the door can be swung on its hinges into open position. When the door, with the recessed locking-pin *a*², is pressed down, the latter is engaged by the catch and the door thereby held in closed position.

Below the opening *a'* of the top plate A' is arranged a stationary shelf or table C, between which and the door is guided a record-strip R, which is wound on a suitable roller *r*, that is supported on a stationary pin *r'*, and retained on the same by means of a hollow cap *d* at the end of a pivoted spring *d'*, so as to be readily removed from said pin on releasing the hollow socket or cap *d* from the end of the pin or spindle *r'*. The inner end of the record-strip R is retained in any suitable manner on the roller *r*. The end of the strip may, for instance, be inserted into a slit in the roller and locked thereto by means of a suitable key *k*, inserted in said slit, as is evident. In place of the slitted roller an ordinary pasteboard roller may be used, to which the end of the record-strip is pasted or otherwise applied.

When the record-strip is inserted into the apparatus, the outer end of the same is passed over the shelf or table C to a second roller *r*⁴, that is supported on a stationary spindle *r*² at the opposite side of said table, the outer end of the record-strip being attached to the roller in any suitable manner, either in the same way, by means of a slit and key, as with the roller *r*, or otherwise. The roller *r*⁴ is retained on the spindle by means of a set-screw *r*³, the threaded stem of which is screwed into the threaded hollow end of the spindle *r*².

Below the shelf or table C is arranged a clock-train E, which is wound in the usual manner when the apparatus is to be arranged for use. The motion of the clock-train is transmitted to the spindle r^2 by means of suitable gearing, the spindle turning in bearings of the casing A and an intermediate bracket-support A³. The spindle is provided with a stationary collar C' in front of the bracket-plate A³, against which the rear end of the winding-up roller r^4 abuts when the same is placed in position on the spindle r^2 , so that the roller r^4 is in frictional contact with the collar C', which permits thereby the easy and unobstructed repeated movement of the record-strip over the shelf or table C. The ends of the table are slightly curved, so as to facilitate the passage of the record-strip over the same.

The record-strip R is subdivided in such a manner that hours and minutes are marked thereon up to twelve hours, so that each strip is carried through the apparatus in twelve hours. The hour-graduations extend, say, half-way across the strip, while the minute-graduations are shorter, so that sufficient space is left on the strip for the signature of the watchman.

A stationary index i is located at the center of the table, the shank of which is bent downward and attached to the bracket-plate A³. The index is preferably made tapering and provided with an opening i' , into which is adapted to be projected a punch i^2 , which is attached to the free end of a spring i^3 , the opposite end of which is secured to the bracket-plate A³. Said punch passes through an aperture in the table C, that registers with the opening i' in the index-plate i , a small perforated collar J being arranged at the under side of the table, so as to prevent the punch from projecting above the index i . The spring i^3 is provided with an upwardly-extending pin i^4 , that extends through the top plate A', so as to abut against a projection on the frame of the hinged door A². When the hinged door is in closed position, it presses the pin i^4 and spring i^3 and its punch in downward direction, so that the punch will clear the table C and record-strip, moving over the same. As soon as the door is opened the pin i^4 is released and the punch passes through the record-strip and presses an opening in the same. When the door is in open position, the watchman signs his name on the strip and then closes the door again, so that the record-strip is released from the punch or marking-pin and then moves forward again over the table C.

My improved watchman's time-recorder is

preferably located at different floors or points of the mill, factory, brewery, or other building, it being preferably attached to the wall. A record-strip is inserted each evening into each apparatus in the manner described, it being set to the proper time of the day, so that as it is moved forward over the table by the clock-train the graduations coincide with the time of the day. It is supposed that the watchman on his regular beat will pass the apparatus and record his name every hour, in which case he opens the door A² on pulling back the catch, so that the door may be opened and the record-strip pierced at the proper point by the punch or marking-pin, after which he signs his name and closes the door again, so that the apparatus is restored to its former condition. When different watchmen have thus entered their names at the proper time on all divisions of the record-strip, a glance at the record-strip will readily show whether the watchmen have done their duty or neglected the same. Whenever any marking or name is lacking for any hour on the record-strip, the negligence of the watchman can be immediately observed. The strip is removed when used up and a new and unmarked record-strip placed in the apparatus to be ready for use the next time. The record-strips are filed, so that thereby a very reliable record both by the marking of the apparatus and by the signature of the watchman is obtained.

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

In a watchman's time-recorder, the combination of a casing having an opening in its top plate, a hinged door for closing said opening, means for locking said door, a table in the casing, below said opening, a graduated record-strip passing over said table, a clock-train connected with said strip, a marking device consisting of a stationary index having an opening, a flat spring, a punch mounted on the spring and guided through an aperture in the table and into the opening in said index, and acted upon by said spring, an upwardly-extending pin mounted on said spring adjacent to the punch and extending through the top plate, and means for acting on and depressing said pin on the closing of the door, 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.

AUGUST AUF DER HEYDE.

Witnesses:

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M. H. WURTZEL.