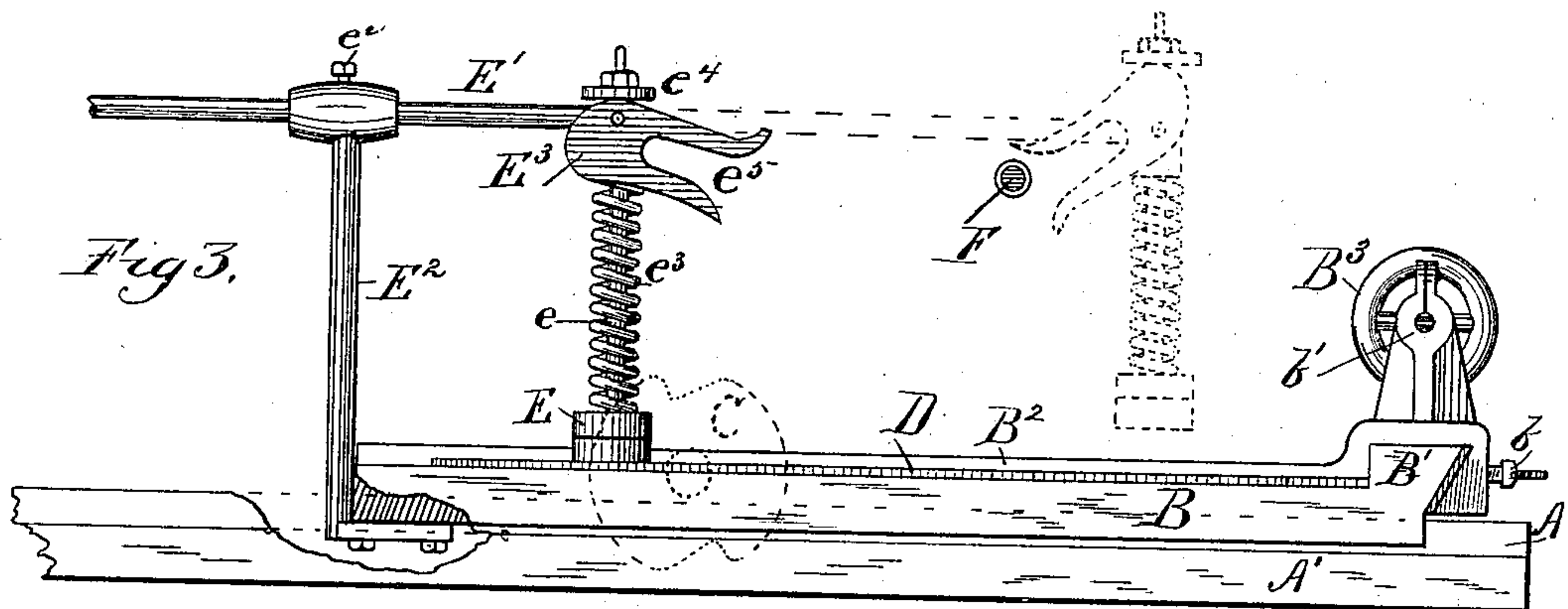
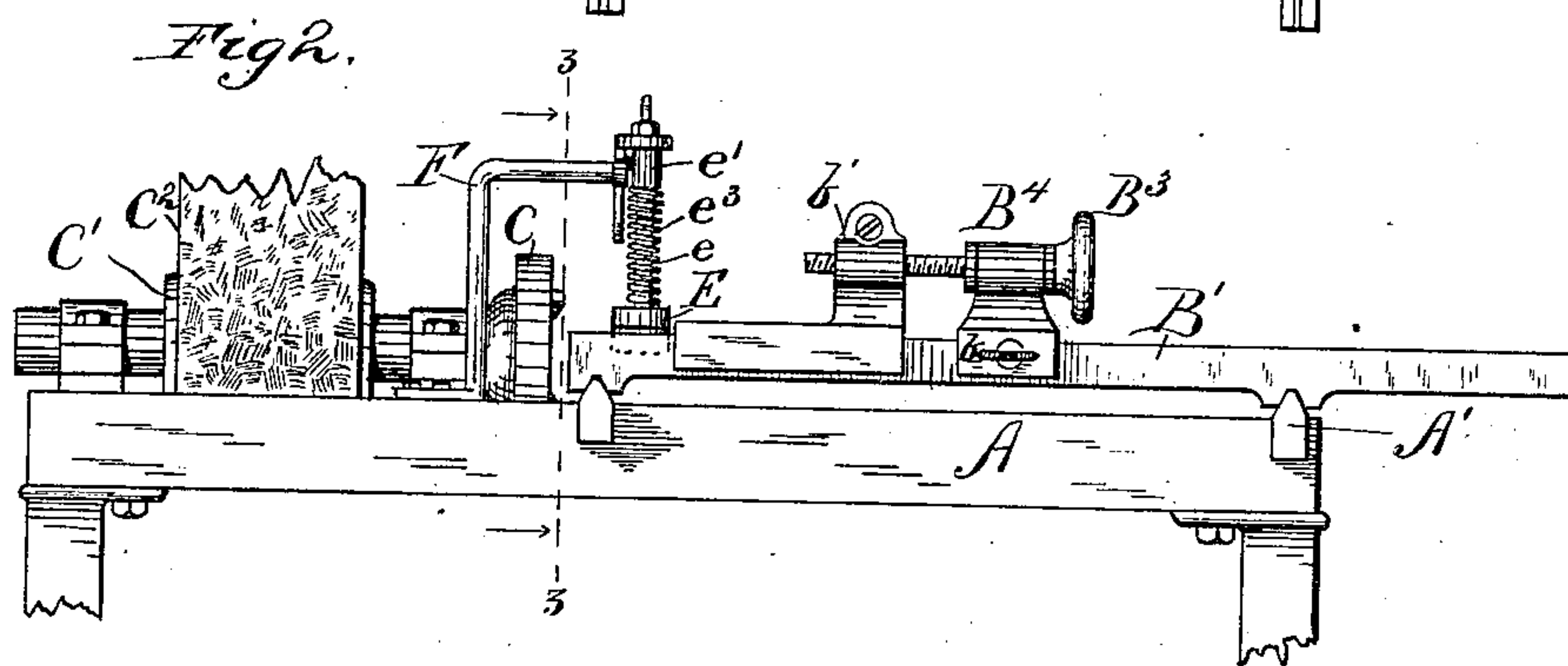
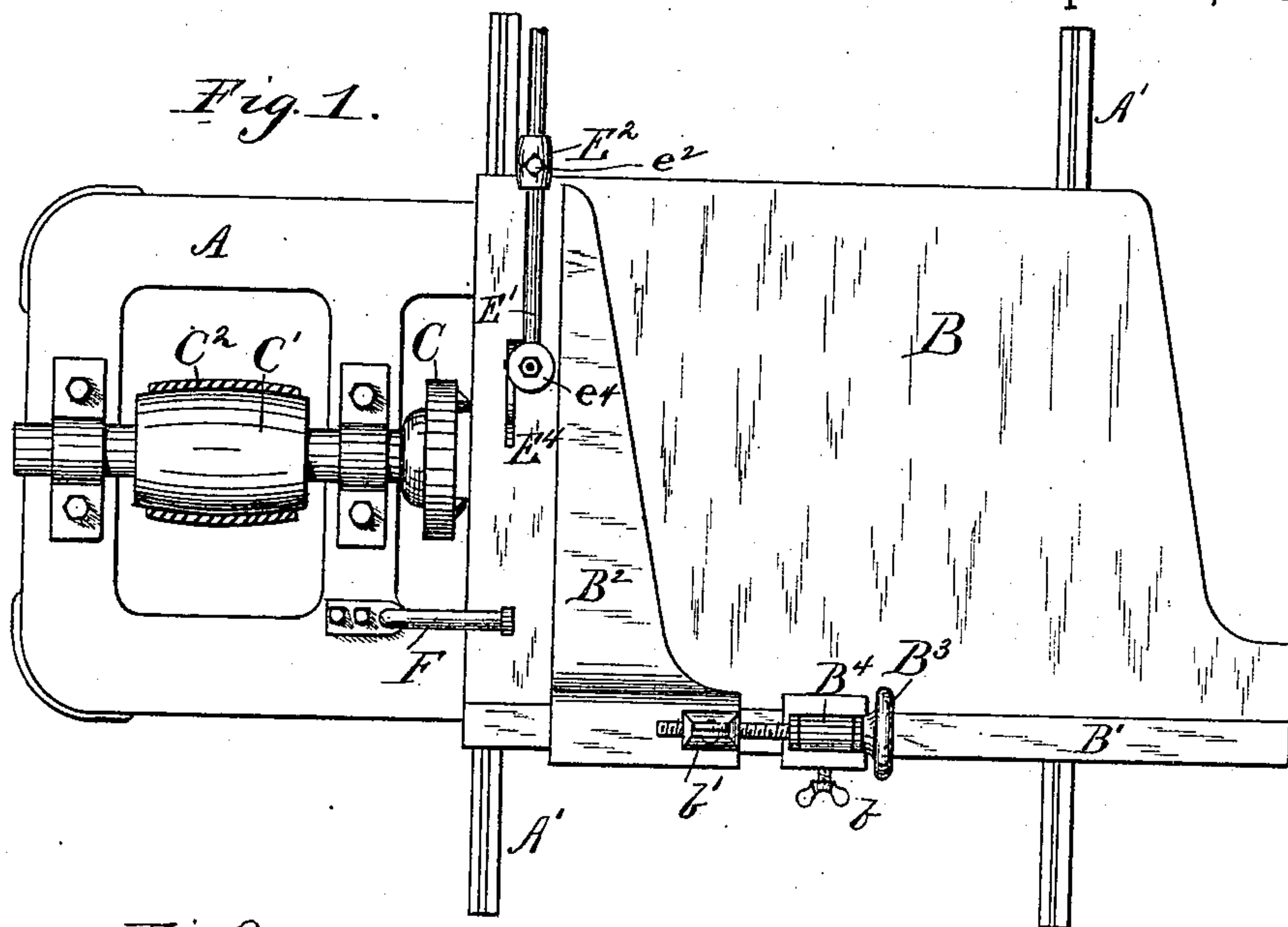


(No Model.)

2 Sheets—Sheet 1.

E. E. PRATT & C. S. PARTRIDGE.
MACHINE FOR TRIMMING STEREOTYPE PLATES.
No. 316,398.
Patented Apr. 21, 1885.



Witnesses:

Saylor E. Brown
Lewis C. Curtis.

Inventors:

Edwin E. Pratt
Charles S. Partridge
By Munday, Evans & Adeock
their Attorneys.

(No Model.)

2 Sheets—Sheet 2.

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Fig 4.

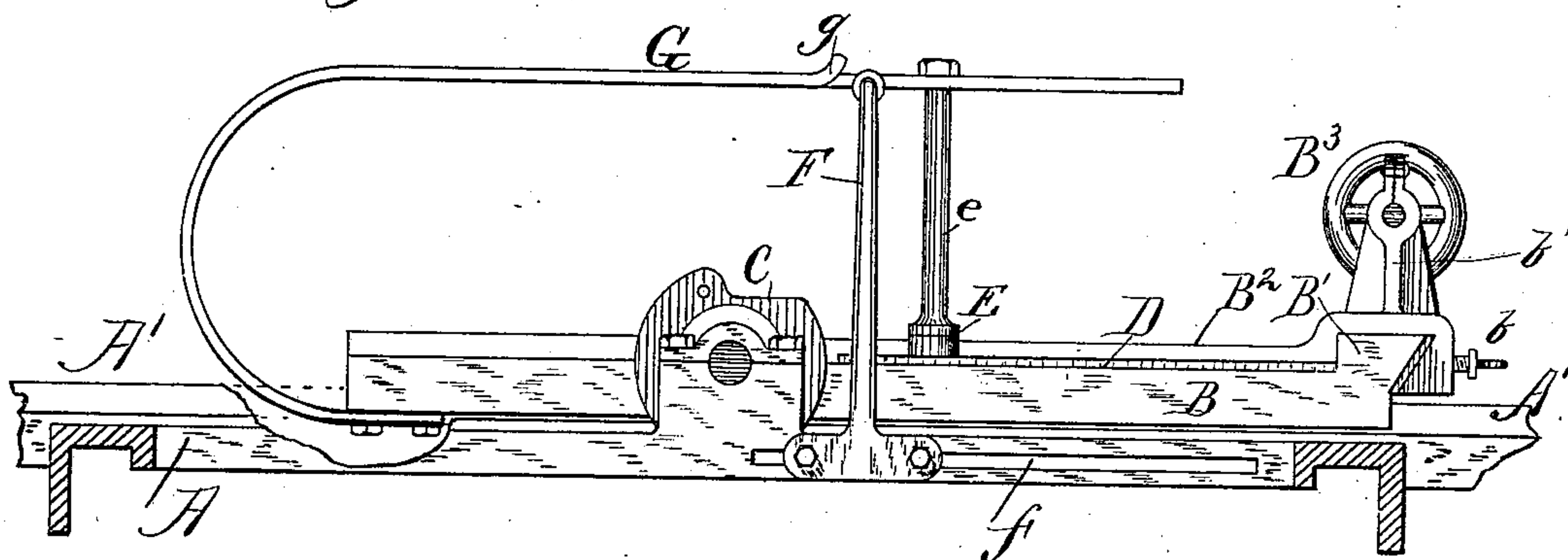
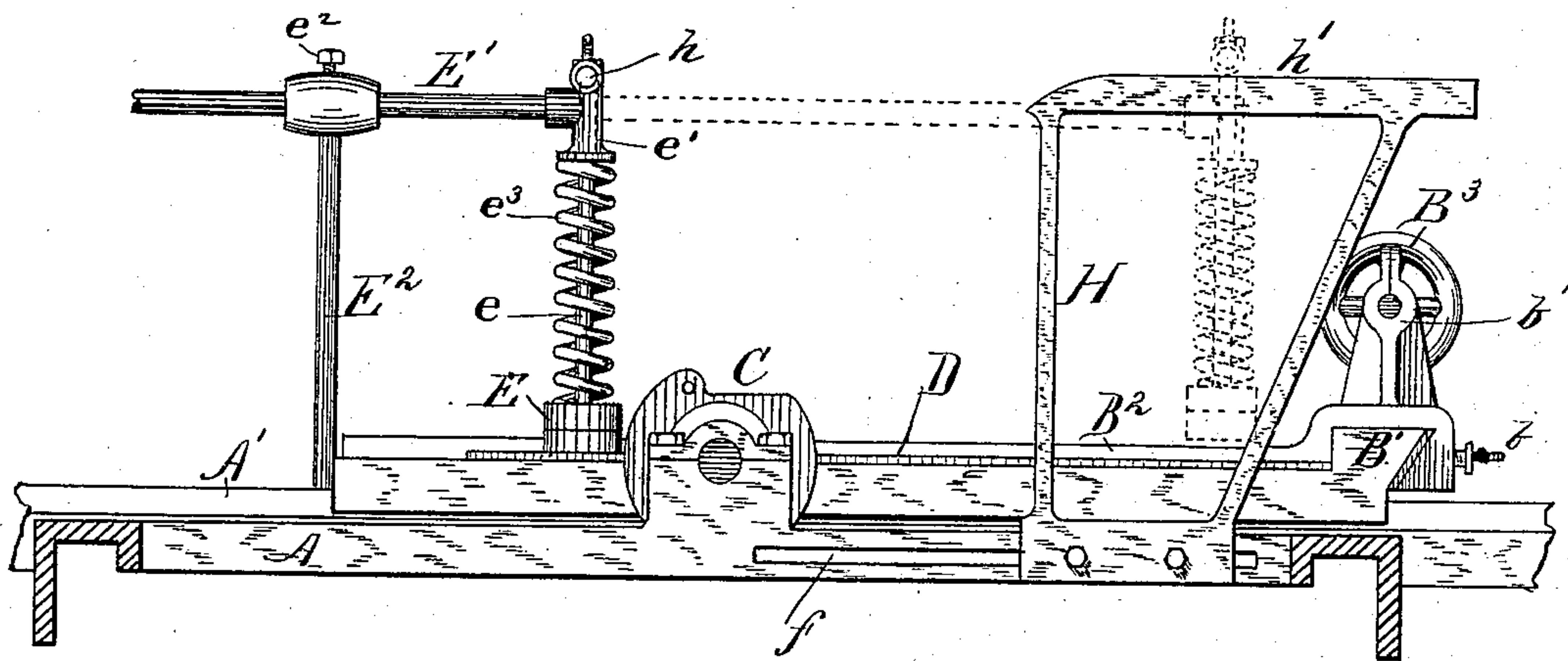


Fig 5.



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UNITED STATES PATENT OFFICE.

EDWIN E. PRATT AND CHARLES S. PARTRIDGE, OF CHICAGO, ILLINOIS,
ASSIGNORS TO THE A. N. KELLOGG NEWSPAPER COMPANY, OF SAME
PLACE.

MACHINE FOR TRIMMING STEREOTYPE-PLATES.

SPECIFICATION forming part of Letters Patent No. 316,398, dated April 21, 1885.

Application filed May 17, 1884. (No model.)

To all whom it may concern:

Be it known that we, EDWIN E. PRATT and CHARLES S. PARTRIDGE, citizens of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Machines for Trimming Stereotype-Plates, of which the following is a specification.

This invention relates to machines for trimming the edges of stereotype-plates; and it consists, first, in the combination, with a rotary cutter, of a reciprocating carriage or platen provided with a movable gage for adjusting the plate laterally, a stationary guide for positioning the plate at the rear, and a presser-foot for holding the plate, essentially as hereinafter set forth.

The invention consists, secondly, in the combination, with a rotary cutter, of a reciprocating carriage having a readily-adjustable lateral gage, the presser-foot, and devices for lifting and releasing the presser-foot, substantially as hereinafter set forth.

This invention further consists in the novel construction and combinations of parts, hereinafter fully set forth.

The accompanying drawings show at Figure 1 a plan view of our improved trimming-machine. Fig. 2 is a side elevation of the same. Fig. 3 is an enlarged section upon the line 3 3 of Fig. 2. Figs. 4 and 5 are views corresponding to Fig. 3, showing modifications of the machine.

In the drawings, A represents the frame of the machine, having mounted therein guide-ways A', whereon the carriage or platen B may be reciprocated.

C is the rotating cutter, and C' C² are respectively the pulley and belt by which it is operated.

The carriage moves past the face of the cutter, and in Fig. 3 D represents a stereotype-plate in position thereon to be trimmed. At the rear of the carriage is a raised ledge, B', the face whereof serves as a guide for the rear end of the plate.

B² is a movable gage, the face whereof is parallel to the line of motion of the carriage. It is long enough to gage the entire length of the plates to be operated upon, and slides lat-

erally upon the carriage, being guided in such movements by fitting its widened rear end over and to the ledge B'. All parts of this gage move alike, and by means of it the operator is enabled not only to make the sides of the plate exactly parallel, but also to cut much or little therefrom, as required. To obtain ready adjustability for this gage, we employ the adjusting-screw B³, which is mounted in a head, B⁴, secured to the ledge B' by the set-screw b, and engages with the bracket b' upon the gage.

By this construction the operator is enabled to keep one hand upon the operating-wheel of the adjusting-screw, and thereby to move the gage to or from the cutter, according to the nature of the work to be done, without loss of time and between the reciprocations of the carriage.

The front end of the plate, unless held to the carriage, is liable to spring up when undergoing the action of the cutter, and to obviate the necessity of holding it by hand we provide upon the carriage a presser-foot, E, adapted to be automatically raised and lowered each time the carriage is reciprocated in operation. This presser-foot is secured upon the end of a rod, e, passing through a sleeve, e', upon the end of an adjustable horizontal rod, E', supported above the carriage by the bracket E², and secured therein by a set-screw, e².

Encircling the presser-foot rod, between the sleeve and the foot, is a coil-spring, e³, which tends to force the foot down upon the plate when it is not lifted therefrom by the pivoted trigger-cam E³, acting upon the collar e⁴ upon the upper end of the rod e.

When a plate has been positioned upon the carriage and the latter is moved forward, this trigger-cam E³ (which at this time is in the position indicated by broken lines in Fig. 3) encounters the stationary arm F, secured to the frame of the machine, and is reversed thereby to the position shown in full lines in said figure, said arm entering the mouth e⁵ of the cam. This allows the presser-foot to fall in obedience to the spring, as clearly indicated. The plate is thus held by the foot until upon the return movement the cam again en-

counters the arm F, and is returned thereby to its first, mentioned position, which, of course, lifts the foot and frees the plate.

The horizontal arm E' is of course so positioned in its holder as to cause the cam to be actuated and allow the presser-foot to drop upon the plate just before the plate encounters the cutter, and to raise the foot just before the carriage has completed its return movement, both operations being wholly automatic.

We have shown in Figs. 4 and 5 modifications of the manner of actuating the presser-foot. In Fig. 4 the presser-foot is secured in a spring-arm, G, fastened to the carriage and provided with an inclined surface, *g*, which will ride upon the arm F and thereby elevate the foot. When the arm G is not in contact with the arm F, the presser-foot will be acting upon the plate. In this form of the invention we secure the arm F by bolts in the slot *f*, which permits it to be adjusted so that it will act at an earlier or later stage, as occasion requires, in the reciprocation of the carriage. In the other modification a similar presser-foot to that first described is employed, and it is also secured to a horizontal arm borne by the carriage in the same manner as in the first-described form of the invention. The foot is raised, however, by providing it with an anti-friction roller, *h*, which will ride upon the upper extended surface, *h'*, formed upon an adjustable bracket, H, secured to the frame of the machine. This bracket is adjustable in the same manner as arm G in Fig. 4; but we do not regard this adjustability as essential in either of these modified forms of the invention.

We claim—

1. The machine for trimming the edges of stereotype-plates, consisting of a frame, a ro-

tary cutter, and a reciprocating carriage or platen, said carriage being provided with a laterally-adjustable gage, a rear stationary guide, and a presser-foot, substantially as specified.

2. The cutter, the reciprocating carriage, the readily-adjustable gage, and the presser-foot and its lifting and releasing devices, all combined and operating substantially as specified.

3. The combination, with the reciprocating carriage of a stereotype-trimming machine, of a presser-foot for holding the plate down upon the carriage, such presser-foot being supported upon and moving with the carriage, substantially as specified.

4. The combination, with the reciprocating carriage of a stereotype-trimming machine, of a presser-foot for holding the stereotype there-to, said foot being provided with a spring for depressing it, and a device, substantially such as shown, for lifting said foot, substantially as specified.

5. The combination, with the carriage of a stereotype-trimming machine, of a spring-depressed presser mounted on the carriage, a trigger-cam for raising and releasing the presser, and a stationary trip-arm, substantially as specified.

6. The combination, with the carriage of a stereotype-trimming machine, of the presser, the rod E', and bracket E², said rod being adjustable in the bracket, substantially as specified.

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Witnesses:

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