

(No Model.)

T. H. ACKROYD & A. BROADLEY.
APPARATUS FOR DRAWING SLIVERS FROM GILL BOXES.

No. 407,391.

Patented July 23, 1889.

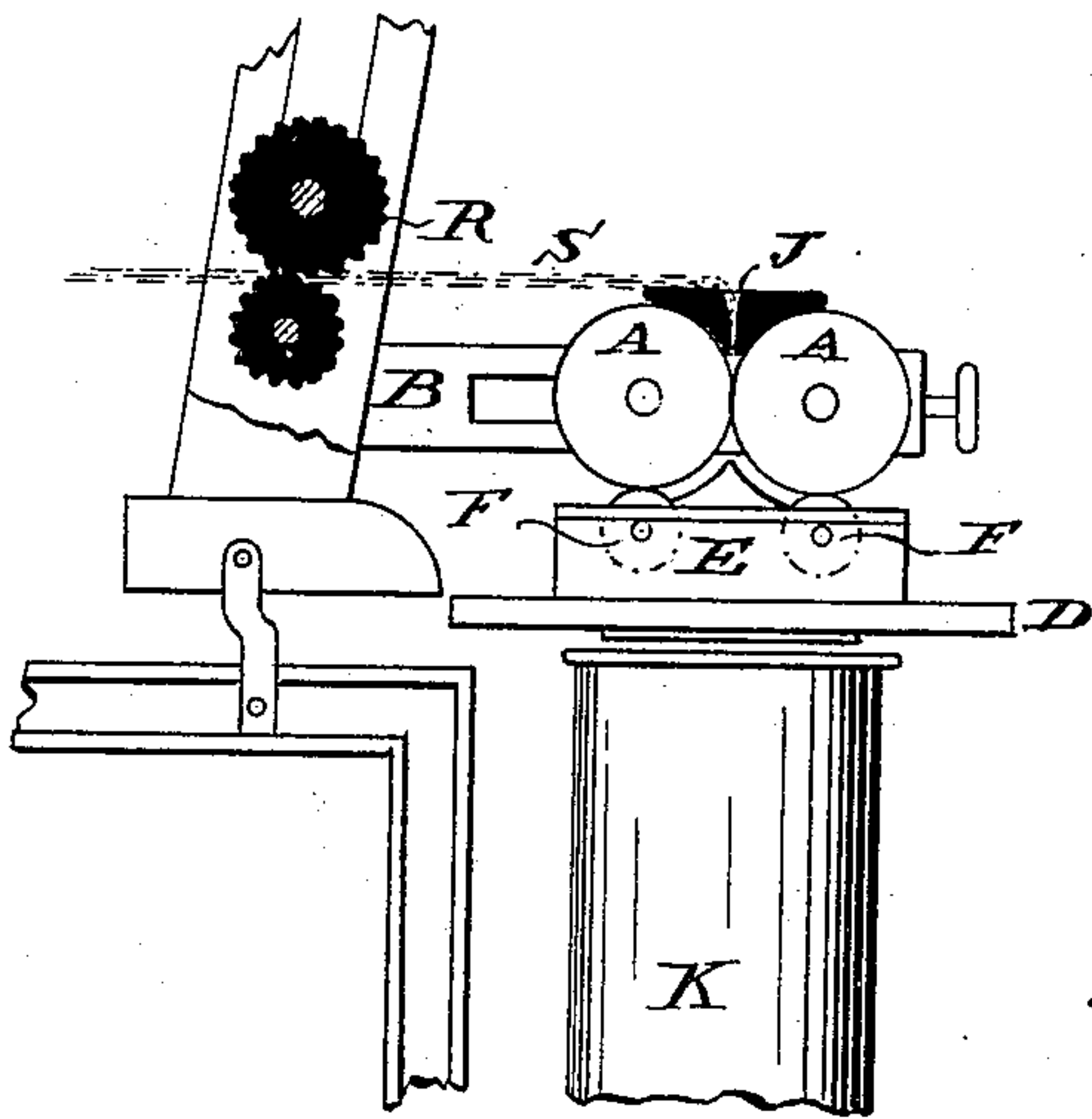


FIG. 1.

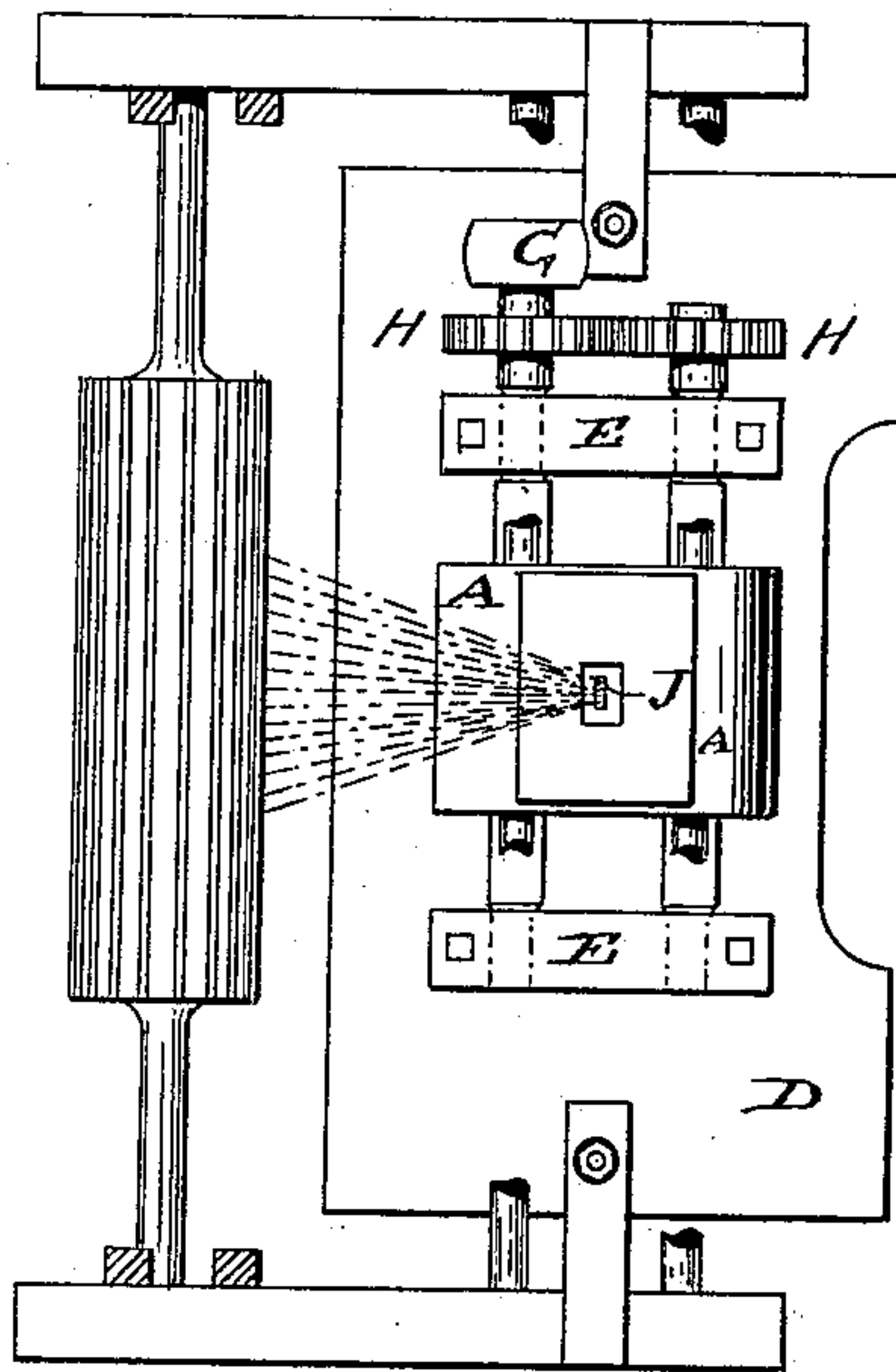


FIG. 2.

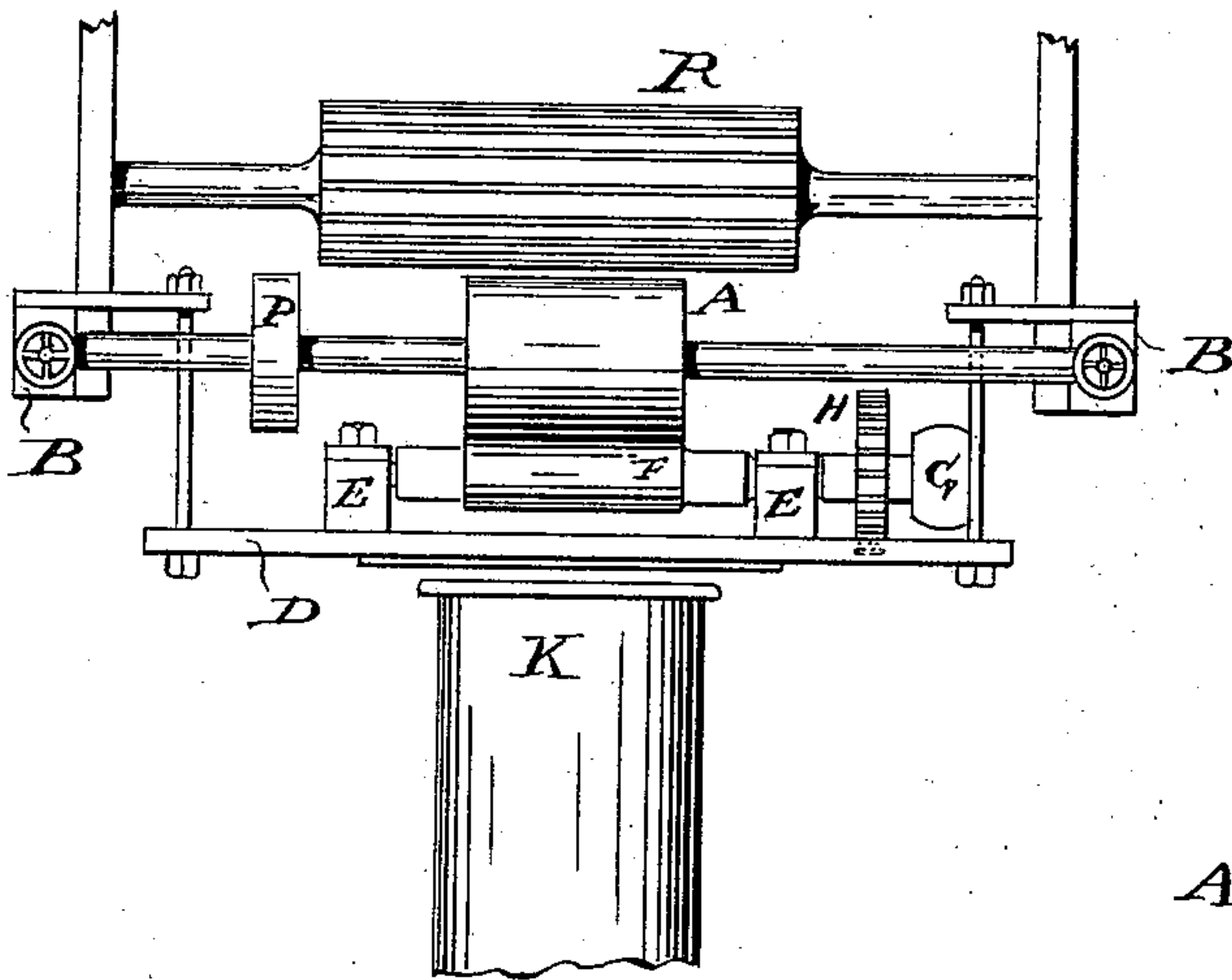


FIG. 3.

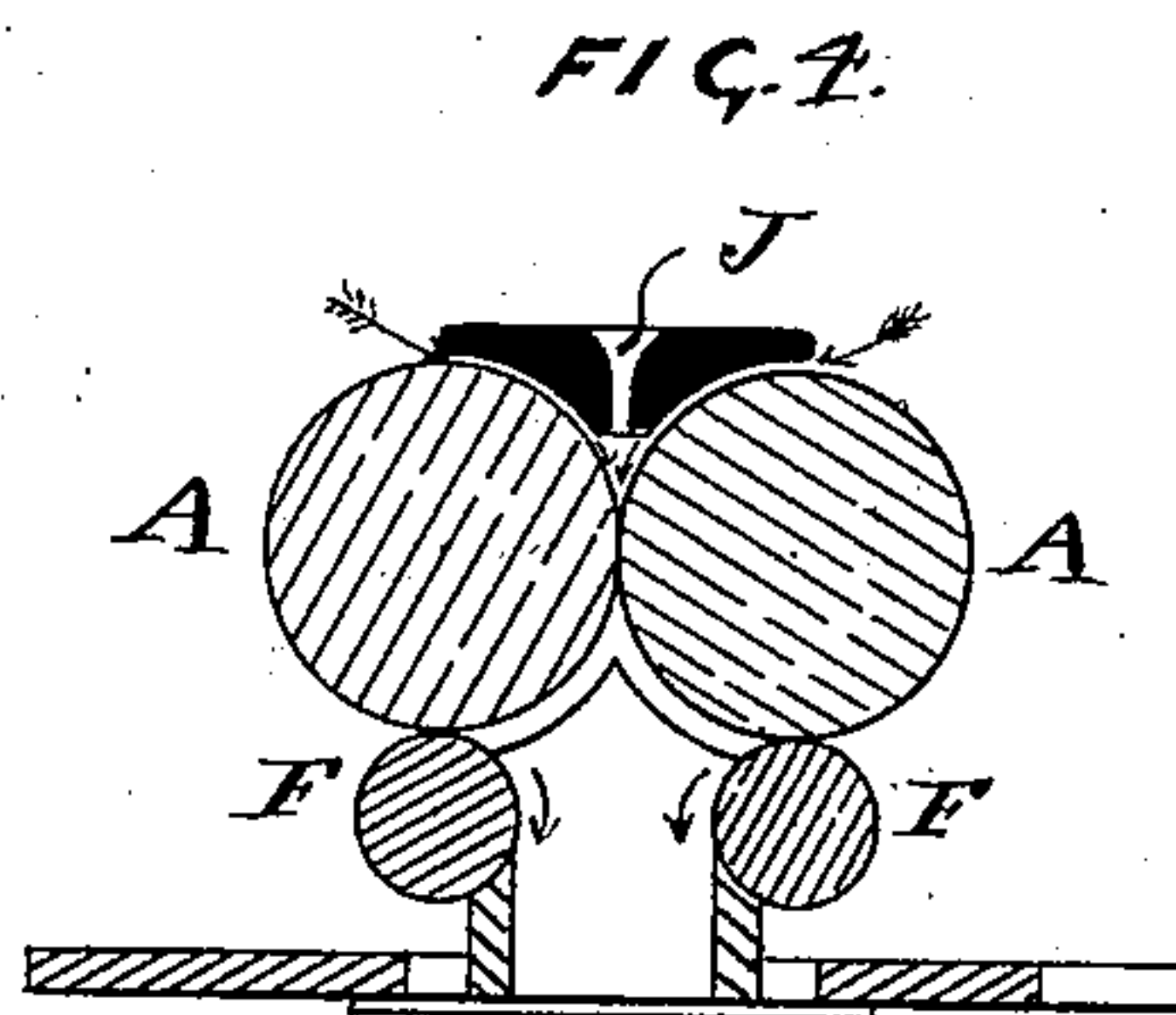


FIG. 4.

WITNESSES.

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APPARATUS FOR DRAWING SLIVERS FROM GILL-BOXES.

SPECIFICATION forming part of Letters Patent No. 407,391, dated July 23, 1889.

Application filed August 15, 1888. Serial No. 282,829. (No model.)

To all whom it may concern:

Be it known that we, THOMAS HENRY ACKROYD and ALLAN BROADLEY, subjects of the Queen of Great Britain and Ireland, and residing at Birkenshaw, near Leeds, in the county of York, England, have invented certain Improvements in Apparatus for Drawing Slivers from Gill-Boxes, &c., of which the following is a specification.

10 This invention relates to certain improvements in the means of delivery of the fibrous sliver from gill-boxes, combing-machines, and the like, and has for its object the better delivery of the sliver as it is passed from
15 these machines into the respective sliver-cans.

Hitherto some difficulty has been experienced in passing the slivers through the calender-rollers, as there is a tendency of the
20 loose fibers of the sliver in passing through the said rollers to wrap round the same and thus draw from the sliver some of its bulk, and in time choke the rollers altogether.

We accomplish our object by placing a pair
25 of rotating clearing-rollers below the ordinary calender-rollers, which are in contact with each other, and thus pass the sliver intact and without any possibility of the loose fibers of the sliver wrapping round the upper or calender rollers. By this our arrangement we
30 dispense with the ordinary cloth-lined "rubbers," which are liable to great wear and tear, involving constant repairs or renewals.

In order that our invention may be understood, we have prepared a sheet of drawings, wherein—

Figure 1 represents a side view, partly in section, of our improved apparatus as applied to gill-boxes. Fig. 2 is a broken plan, and Fig.
40 3 a front view, of the same, and Fig. 4 a cross-section through the rollers.

The calender-rollers A A are shown as attached to the delivery end of a gill-box and supported by the usual brackets B B, secured
45 in the same manner as hitherto. The calender-rollers A A are arranged in contact with each other and are driven in the usual manner by gearing or by a belt passing over pulley P, and below the rollers a plate D is se-

cured in any suitable way, as by bolts passing through projections secured to the usual brackets B B. On this plate D are fixed the journal-blocks E E, for supporting the additional rollers F F, driven by a belt on pulley G, the roller-spindles being geared together
55 by spur-wheels H H. The rollers all revolve in the direction of the arrows, and the circumferences of the respective top and bottom rollers are close together. The fibrous sliver S, on leaving the rollers R of the gill-box, is
60 drawn through the hole J in the ordinary guide-plate by the revolving calender-rollers A A, and by the circumferences of the respective rollers being close together and rotating in the direction indicated any loose
65 fiber from the sliver is conducted along with the body of the sliver into the can K, placed below to receive it, instead of the same wrapping round the calender-rollers, as is now
70 often the case.

Although the apparatus is shown applied to a gill-box, it will be well understood by persons skilled in the art of preparing fibrous material for spinning that calender-rollers of the same construction are applied to combing-
75 machines for drawing the slivers therefrom, and that by applying our additional rollers thereto in the manner described the slivers will be more effectually conducted into the cans below. 80

What we claim is—

The combination of a pair of calender-rollers with a pair of additional rollers, and means, substantially as described, for driving the latter, the calender-rollers being in
85 contact with each other, and each additional roller being in contact with its respective calender-roller, all substantially as and for the purpose set forth.

In testimony whereof we have signed our
90 names to this specification in the presence of two subscribing witnesses.

THOS. HENRY ACKROYD.
ALLAN BROADLEY.

Witnesses:

JOHN WAUGH,
WM. PREST.