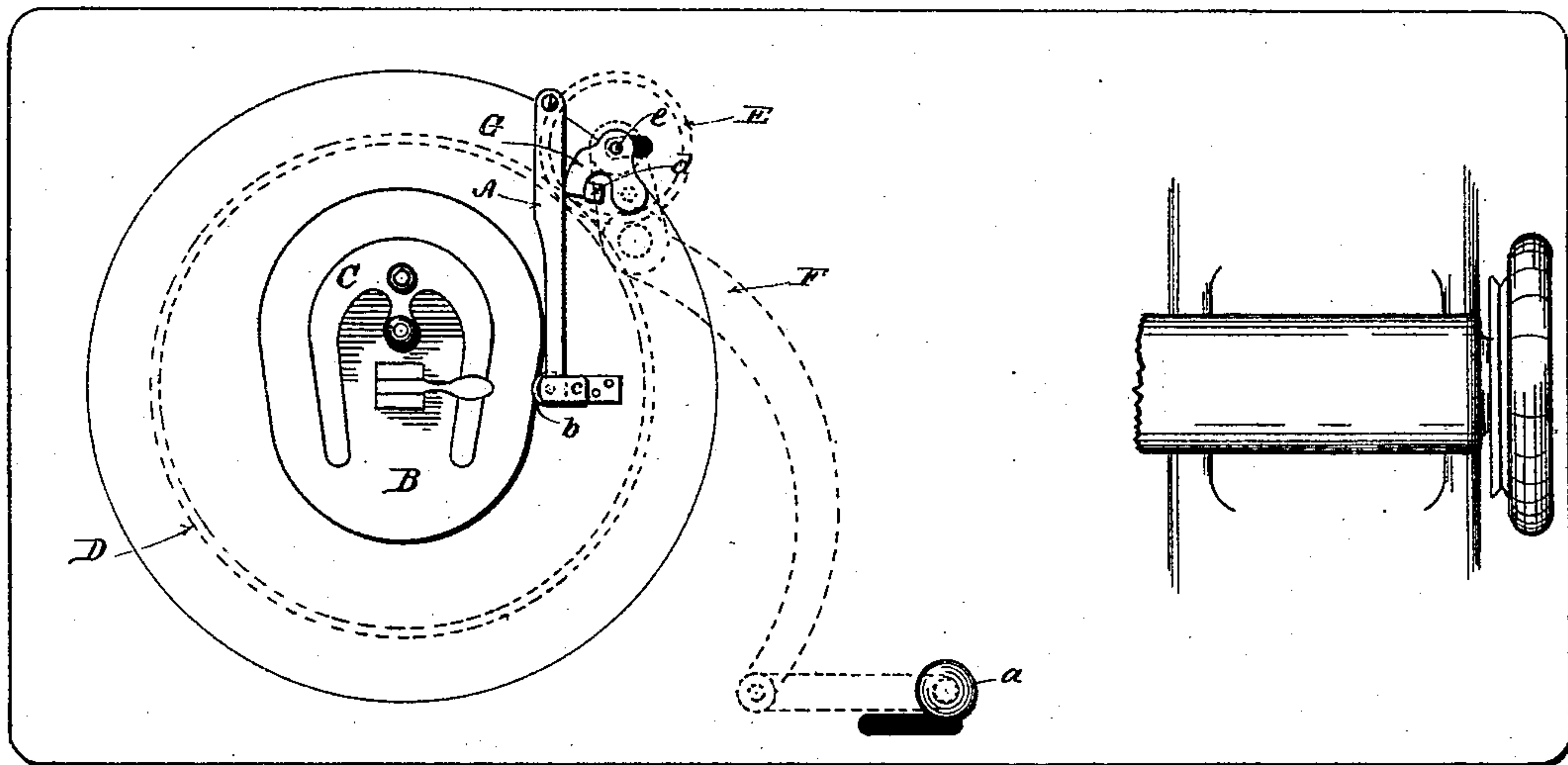


(No Model.)

R. SPAHN.
BUTTON HOLE SEWING MACHINE.

No. 444,467.

Patented Jan. 13, 1891.



WITNESSES:

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RUDOLPH SPAHN, OF BROOKLYN, NEW YORK.

BUTTON-HOLE SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 444,467, dated January 13, 1891.

Application filed May 10, 1890. Serial No. 351,313. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH SPAHN, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Attachment for Button-Hole Sewing-Machines, of which the following is a specification.

My invention relates to an improvement in button-hole-stitching machines, and particularly to that class of the aforesaid machines in which the feed-plate to which the cloth is clamped is operated by a spur-wheel and pinion, the pinion being driven automatically from the driving-shaft.

In these machines a spring or cushion A is employed, which carries a roll which bears against the edge of the feed-plate to prevent any shaking and to insure a steady motion to the same. When the button-hole is completed, the feed-plate is returned to the starting-point by hand, and with the cushion bearing against it it requires considerable exertion and makes excessive wear of the bearing parts.

My invention consists in providing a wedge or cam to be operated by the same lever which throws the feed-pinion out of gear to press against the cushion when the feed is in gear and to relieve the cushion when the feed-pinion is thrown out of gear.

In the drawing I have shown a plan view of the bed and a portion of the head of the machine to which my improvement is adapted.

The details of the movement of the feed-plate are not shown, as they form no part of my improvement.

The feed-plate B has on its upper side the clamping device C. It is moved by gear D, (shown by the dotted circles,) which has the feed-pinion E meshed into it. The feed-pinion has its bearings in the lever F, by which it is thrown in and out of gear. The lever F is pivoted to the bed and is moved into its different positions by a connecting-bar into which the clamp-screw *a* is screwed.

The cushion A is pivoted to the bed of the machine, and has at its free end a roll which comes against the edge of the plate B. The free end has a guide *c* to prevent its lifting away from the bed.

The cam G swings on a pivot in the bed, and has a pin *e* extending downward through a slot in the bed and which enters the lever F. Its free end wedges between the cushion A and a pin *d*, driven into the bed.

It is obvious that when the lever F is moved to throw the feed-pinion out of gear it will also move the cam, relieving the cushion.

Having described my invention and its mode of operating, what I claim as new, and desire to secure by Letters Patent, is—

The combination of feed-plate B, gear D, pinion E, and lever F with cushion A and cam G, the cam G and pinion E arranged to be operated simultaneously by the lever F, as set forth.

Signed at Brooklyn, in the county of Kings and State of New York, this 5th day of May A. D. 1890.

RUDOLPH SPAHN.

Witnesses:

JOHN STEEL,
FR. S. HAAS.