

(No Model.)

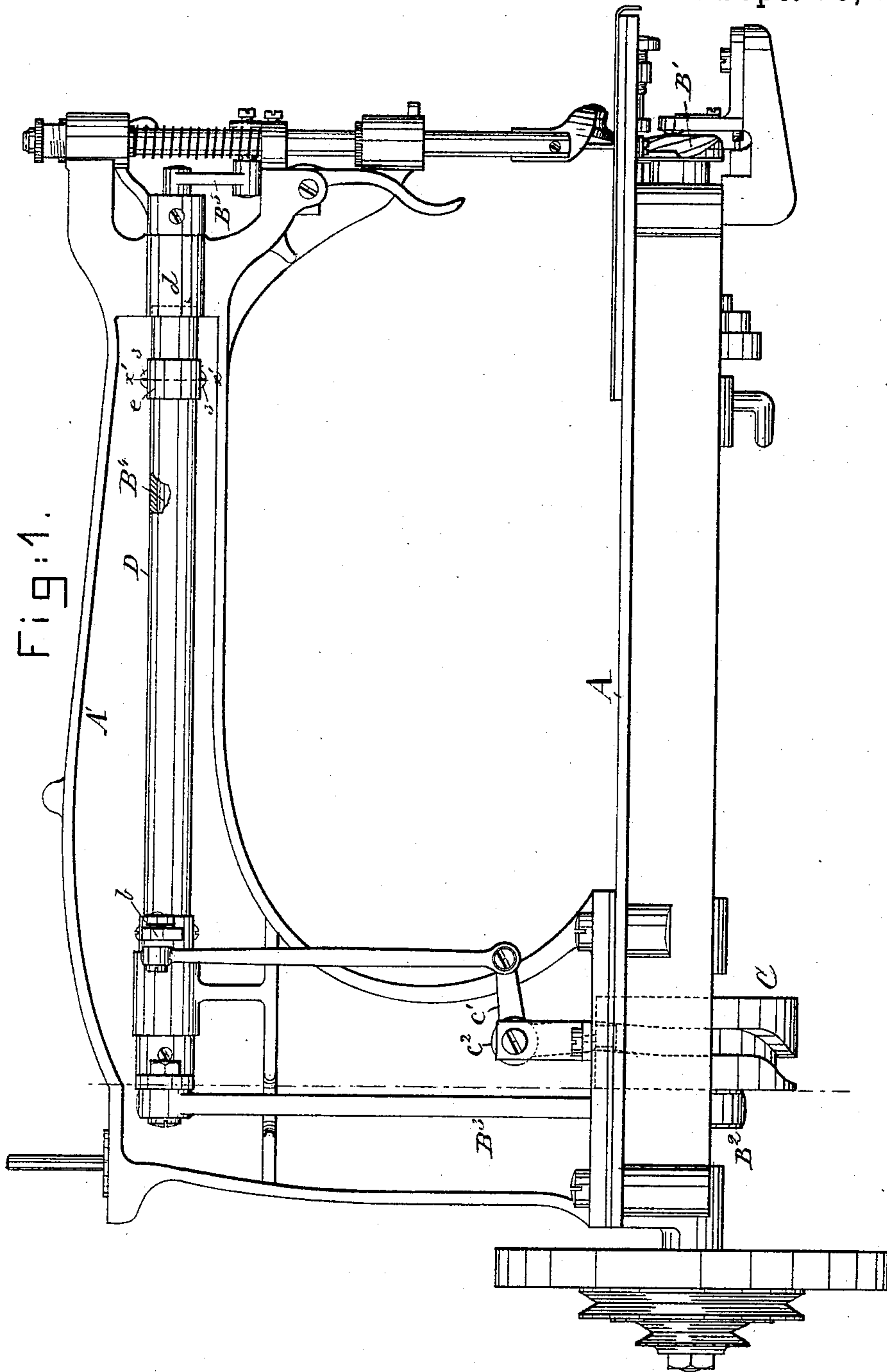
2 Sheets—Sheet 1.

J. E. WIGGIN.

TAKE-UP MECHANISM FOR SEWING MACHINES.

No. 326,533.

Patented Sept. 15, 1885.



Witnesses.

Arthur Lippert.
John F. Co. Printer.

Inventor.

John E. Wiggin.
by Crosby & Gregory Attys

(No Model.)

2 Sheets—Sheet 2.

J. E. WIGGIN.

TAKE-UP MECHANISM FOR SEWING MACHINES.

No. 326,533.

Patented Sept. 15, 1885.

Fig:5.

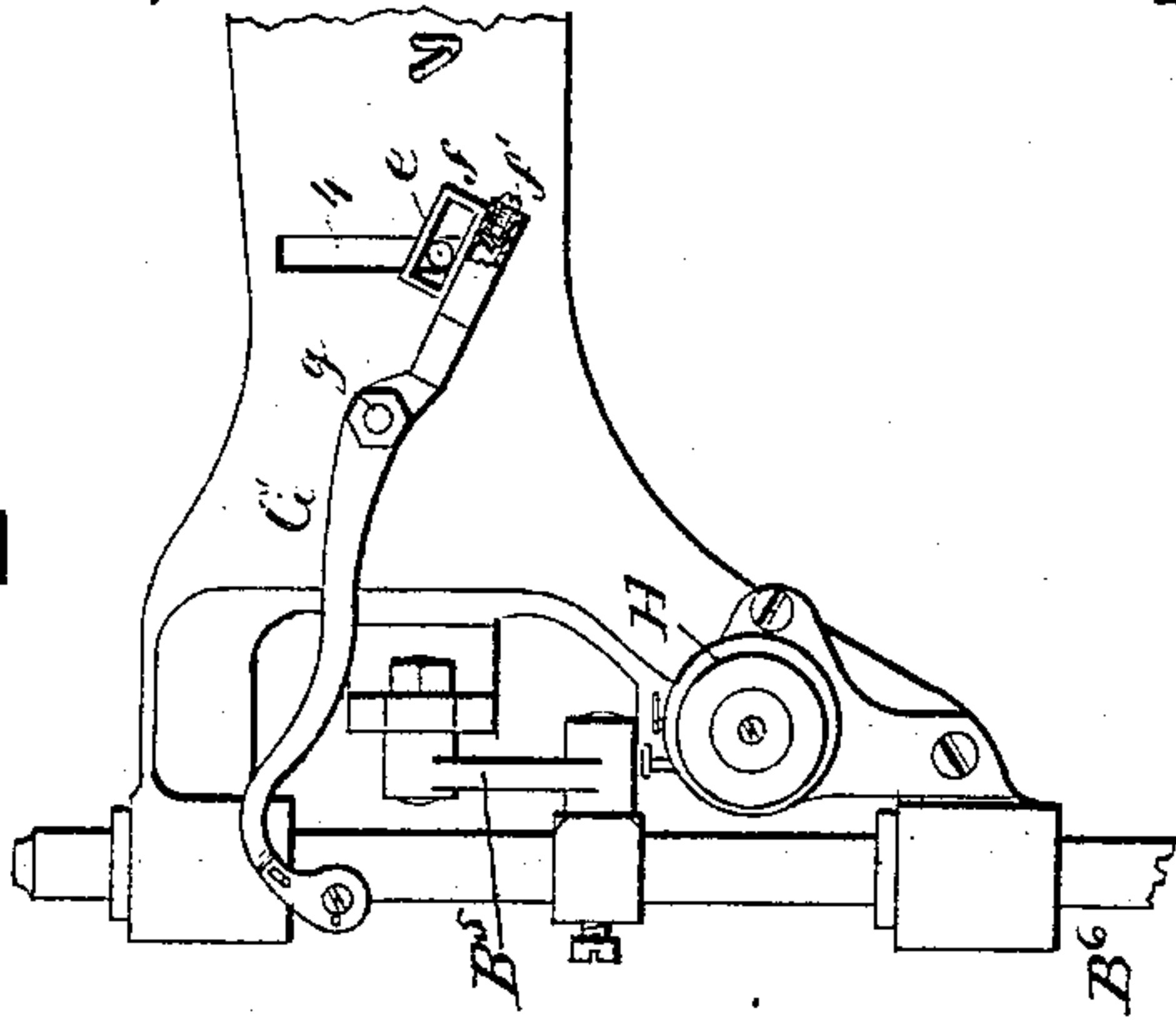


Fig: 4.

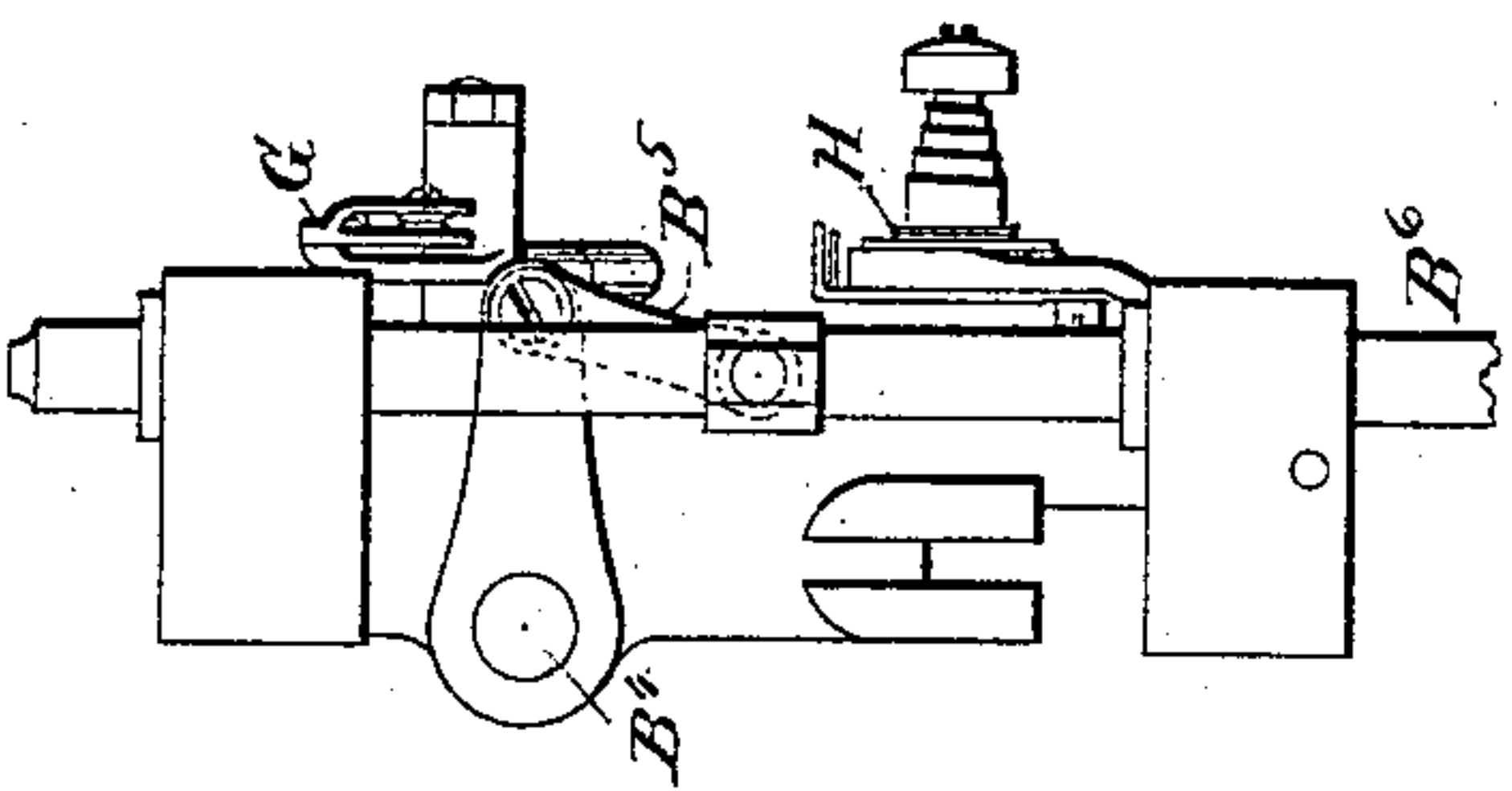


Fig:3.

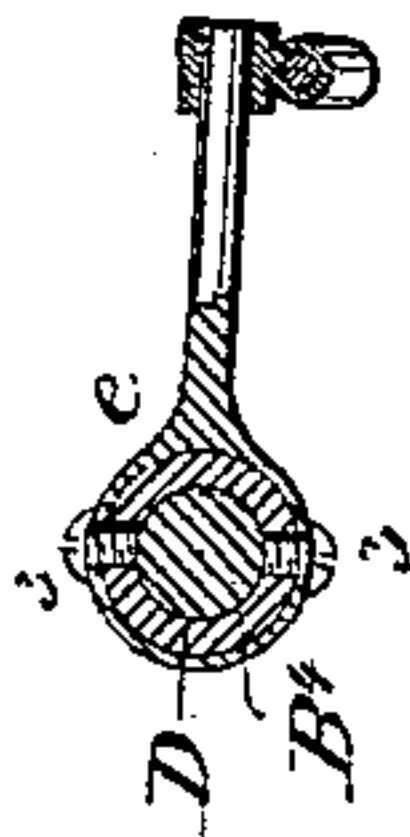


Fig:2.

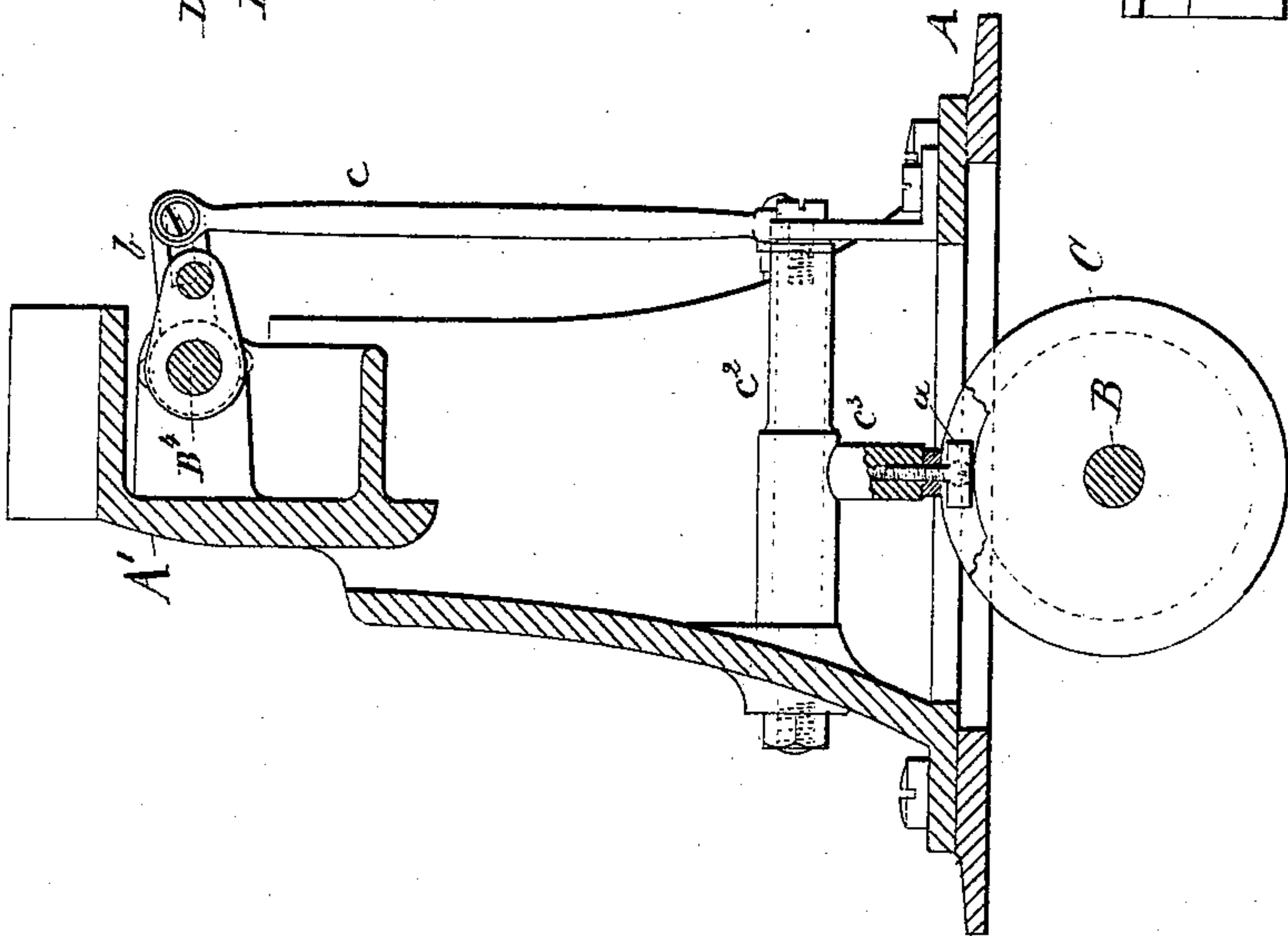


Fig:6.



Witnesses.

Arthur Lippertsen.
John F. C. Prinkert.

Inventor.

John E. Wiggin
by Crosby & Gregory attys.

UNITED STATES PATENT OFFICE.

JOHN E. WIGGIN, OF STONEHAM, ASSIGNOR OF TWO-THIRDS TO GEORGE W. BROWN AND DANIEL H. BURT, BOTH OF BOSTON, MASSACHUSETTS.

TAKE-UP MECHANISM FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 326,533, dated September 15, 1885.

Application filed September 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. WIGGIN, of Stoneham, county of Middlesex, State of Massachusetts, have invented an Improvement in
5 Take-Up Mechanisms for Sewing-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object to simplify and improve the take-up mechanism, to thereby enable it to more perfectly draw up and tighten the stitch.

My invention is shown as applied to a Wheeler & Wilson machine, style No. 10; and it
15 consists, essentially, in a tubular or sleeve-like rock-shaft having as its fulcrum the needle-bar-actuating rock-shaft of the said machine, the said tubular or sleeve-like rock-shaft operating by a suitable arm on a vibrating take-up lever located at the front or head of the machine, as will be described.

Figure 1, in side elevation, represents a Wheeler & Wilson machine with my improvements added; Fig. 2, a section thereof in the
25 dotted line $x x$, Fig. 1. Fig. 3 is a sectional detail in the line $x' x'$, Fig. 1; Fig. 4, a partial front end elevation of Fig. 1; Fig. 5, a partial front side elevation of the head of the machine
30 with the take-up lever; and Fig. 6 is a detail showing the take-up cam developed.

The frame-work $A A'$, main rotating shaft B , hook B' , eccentric B^2 , link B^3 , needle-bar-operating rock-shaft B^4 , link B^5 , needle-bar
35 B^6 , the take-up-moving cam C , and shoe or block a are all as common in the said Wheeler & Wilson machine, style No. 10, so need not be herein further described.

In the said machine as now commonly built
40 the take-up lever is located in the standard of the upright arm, and a very long loop of thread is drawn out at the side of the overhanging arm. The nearer the take-up lever to the path of movement of the needle and to the stitch-making point, the more positive the motion
45 of the take-up and the better the stitch.

To enable the take-up lever to be placed in or near the head of the machine, I have provided a long tubular sleeve or rock-shaft, D ,
50 which I have placed about the needle-bar-actuating rock-shaft, so that the latter constitutes

the fulcrum for the said sleeve or shaft D . This sleeve D at its rear end has an arm, b , which by link c is joined to an arm, c' , of a rock-shaft, c^2 , (see Fig. 2,) provided with a
55 second arm, c^3 , having at its lower end the shoe a referred to, which enters the groove in the cam C . The sleeve D at its front end enters the bearing d , as shown by dotted lines, Fig. 1; and at a short distance from its end, as
60 herein shown, the said sleeve D has attached to it firmly by screws 3 3 an arm, e , the outer end of which, extended through a slot, 4, enters an opening in a swivel-block, f , mounted
65 loosely upon the reduced round end of the take-up lever G , the said swivel-block being kept upon the end of the said take-up lever by means of a screw, f' .

The take-up lever has its fulcrum at g , and its forward end, provided with the usual
70 thread-pulley, is located close to the side of the needle-bar and vibrates near the line of the center of the axis of the said needle-bar.

The tension device H , of usual construction, is connected with the head of the machine
75 close to the lower bearing for the needle-bar, and occupying such position the take-up, which receives the needle-thread between the said tension device and the eye of the needle,
80 has but a comparatively short loop of thread to act upon, and consequently the stitch may be better made and set.

The take-up herein shown, in the formation and completion of the stitch, is operated with relation to the needle and hook in the
85 time and order common to the said Wheeler & Wilson machine.

I claim—

1. The needle-bar, its operating rock-shaft, and means to actuate it, combined with the
90 sleeve D , surrounding the needle-bar-operating rock-shaft, and with the take-up lever actuated by the said sleeve, substantially as described.

2. The rocking sleeve and its attached arm
95 e , combined with the take-up lever fulcrumed on the head of the machine, and having the swivel-block mounted thereon loosely and engaged by the said arm e , substantially as described.
100

3. The stitch-forming mechanism containing as an element a rocking shaft to actuate

the needle-bar, and the tension device H, located at the head of the overhanging arm of the machine, and the take-up lever fulcrumed on the head of the machine, combined with
5 the rocking sleeve D and its arm e, and with means to rock the said sleeve, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN E. WIGGIN.

Witnesses:

G. W. GREGORY,
W. H. SIGSTON.