

No. 734,760.

PATENTED JULY 28, 1903.

C. W. SLEEPER.
FEEDING MECHANISM FOR SIDE SEAMING MACHINES.

APPLICATION FILED MAR. 5, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

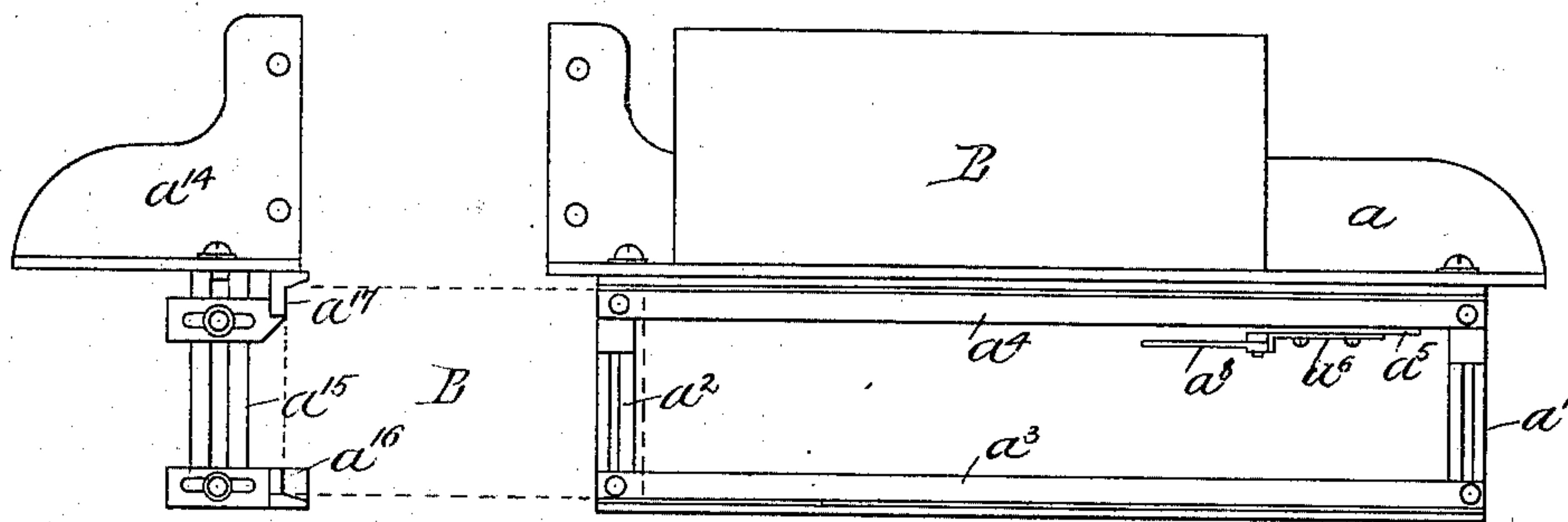


Fig. 2.

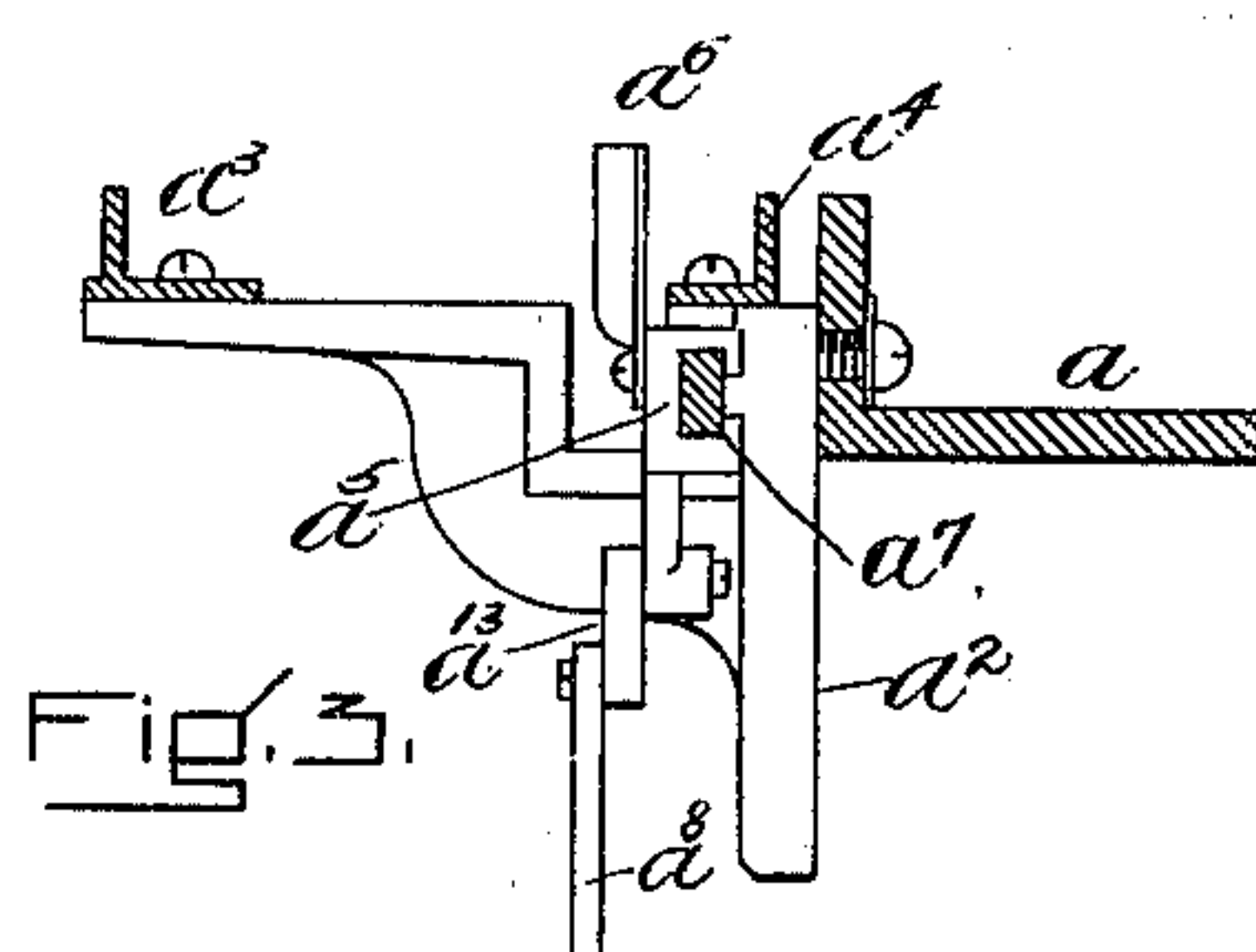


Fig. 3.

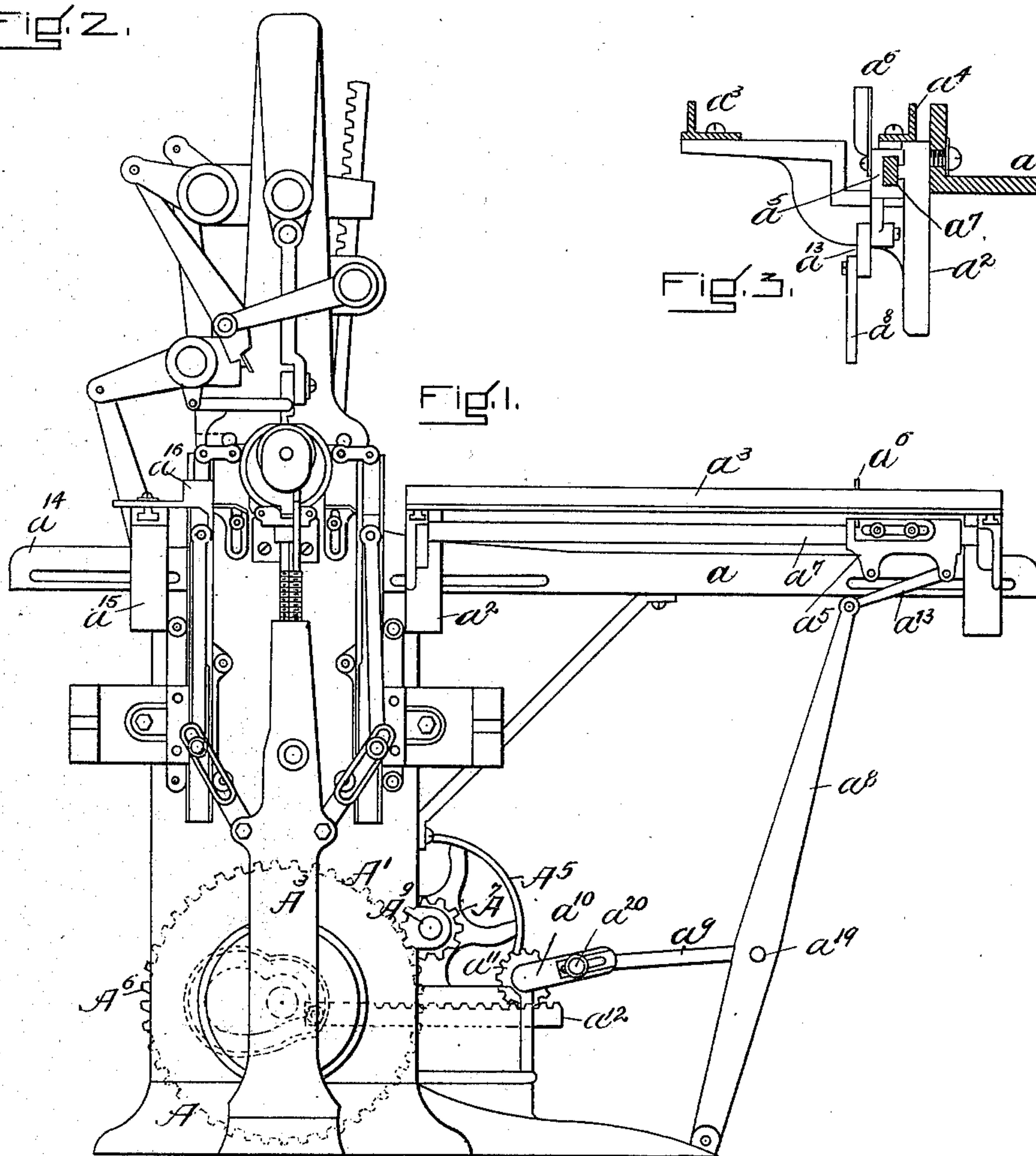


Fig. 1.

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CHARLES W. SLEEPER, OF LANCASTER, NEW HAMPSHIRE, ASSIGNOR TO
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FEEDING MECHANISM FOR SIDE-SEAMING MACHINES.

SPECIFICATION forming part of Letters Patent No. 734,760, dated July 28, 1903.

Application filed March 5, 1903. Serial No. 146,420. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. SLEEPER, a subject of the King of Great Britain and Ireland, residing at Lancaster, in the county of Coos and State of New Hampshire, have invented certain new and useful Improvements in Feeding Mechanism for Can-Seaming Machines, of which the following is a specification.

My invention has special relation to improvements in the feeding mechanism described in Letters Patent of the United States No. 585,635, dated June 29, 1897; and it consists in the use of improved stop-guides for guiding the front end of the body-blank and holding it accurately in position before it is acted upon by the forming mechanism, and also in the use of improved mechanism for the operation of the feed-finger.

In the drawings annexed to this specification, Figure 1 is a front view of the entire seaming-machine. Fig. 2 is a plan of the tin-feeding table and guides. Fig. 3 is an end view of the tin-feeding mechanism. Fig. 4 is a detail of mechanism for operating the lever by which motion is given to the feed-finger.

The seaming-machine illustrated in Fig. 1 is fully described in the specification forming a part of Letters Patent for improvement in side-seaming machines, No. 698,066, granted to the American Can Company as my assignee, April 22, 1902.

It consists, essentially, of mechanism for feeding the blank tin plates to the position where they are to be operated upon by the forming mechanism, mechanism for wrapping the blank around a cylindrical former, mechanism for forming the interlocking side seam, and mechanism for ejecting the finished cylinder forming the body of the can.

As the invention claimed in the present application relates only to the feeding mechanism only that portion of the machine is now specifically described.

A is the base of the machine. Upon this is the column A', upon which is mounted the greater part of the operating mechanism.

A⁹ is a shaft passing through the column A' and carrying the driving-pulley A⁵ and pin-

ion A⁷, which engages a gear A⁶ on the cam-shaft A⁸, carrying the cam a¹⁸.

a is a table secured to the column A' for carrying the tin plates to be used in forming can-bodies.

a' a² are T-slotted brackets secured to the table a by screws passing through suitable slots in the flange of the table a and capable of both vertical and horizontal adjustment.

a³ and a⁴ are angle-iron guides adjustably secured to the brackets a' a² by suitable screw-bolts, which engage T-slots in the tops of said brackets.

a⁵ is a block carrying the feed-finger a⁶ and sliding on a bar a⁷, secured to the brackets a' a². The block a⁵ is connected by a link a¹³ to a lever a⁸, pivoted at its lower end to the base of the machine and connected by a link a⁹, pivoted to said lever a⁸ by the pin a¹⁹ to the slotted crank a¹⁰, a projecting stud a²⁰ on the end of said link a⁹ engaging a slot in said crank a¹⁰. An oscillating movement is given to the crank a¹⁰ by means of the pinion a¹¹, engaged by the rack a¹², to which reciprocating motion is given by the cam a¹⁸. Dotted lines, Fig. 4, show the position of the crank a¹⁰ and lever a⁸ at the inner throw of the crank, at which point the crank and link a⁹ should be upon a dead-center—that is, the center of the crank-shaft, the stud a²⁰, and the pin a¹⁹ should be in a straight line, by which arrangement a slight variation in the position of the rack a¹², due to the wearing of the parts or any other cause, will not materially affect the position of the lever a⁸ or the accuracy of the feeding mechanism.

a¹⁴ is a bracket secured to the column A' opposite the table a.

a¹⁵ is a T-slotted bracket secured to the bracket a¹⁴ and provided with means for vertical and horizontal adjustment.

a¹⁶ a¹⁷ are stop-guides adjustably secured to the bracket a¹⁵ and presenting a flaring recess to the sheets of tin B as they are pushed forward between the guides a³ a⁴, the bottom of said recess being just wide enough to receive and hold the sheets, whereby the sheets are accurately alined and held in place to be acted upon by the forming mechanism.

In operation the body-blanks B are placed

in a pile upon the table *a*. The operator takes them one at a time and places them on and between the guides *a*³ *a*⁴, when they are pushed forward under the mandrel by the finger *a*⁶,
5 the forward end of the body-blank being guided and held in place by the stop-guides *a*¹⁶ *a*¹⁷, as shown by dotted lines in Fig. 2.

What I claim, and desire to secure by Letters Patent, is—

- 10 1. In a machine of the class described the adjustable stop-guides *a*¹⁶ *a*¹⁷ having flaring inner sides, in combination with the adjustable guides *a*³ *a*⁴, sliding block *a*⁵ feed-finger *a*⁶ and means for giving said sliding block re-
15 ciprocating motion, the guides *a*¹⁶ *a*¹⁷ being adapted to direct the forward end of the can-blank as it is pushed forward and to hold it

in position for the forming mechanism substantially as described.

2. In a machine of the class described the 20 described mechanism for operating the oscillating lever *a*⁸ by which reciprocating motion is given to the feed-finger, consisting of the link *a*⁹ pivoted at one end to said lever *a*⁸ and at the other end carrying the stud *a*²⁰ work- 25
*a*¹⁰, pinion *a*¹¹ rigidly connected therewith, and rack *a*¹² engaging said pinion and operated by the cam *a*¹⁸ substantially as described.

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Witnesses:

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