

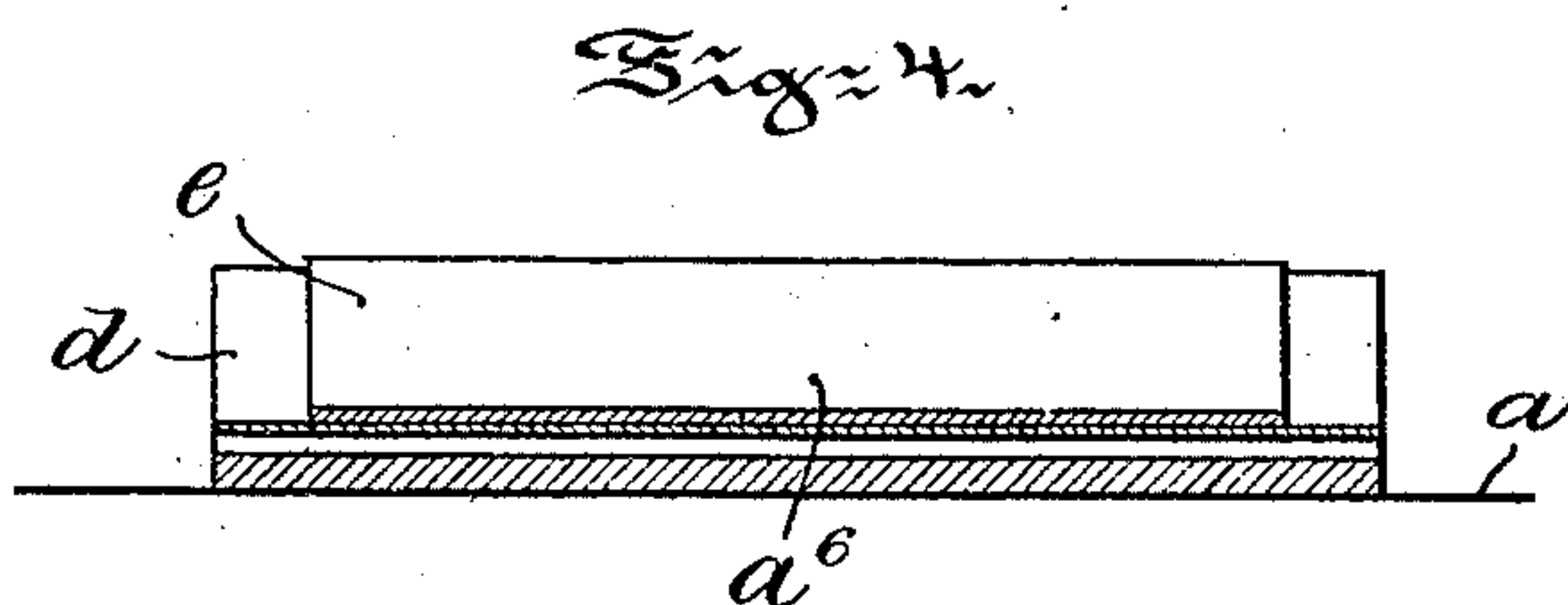
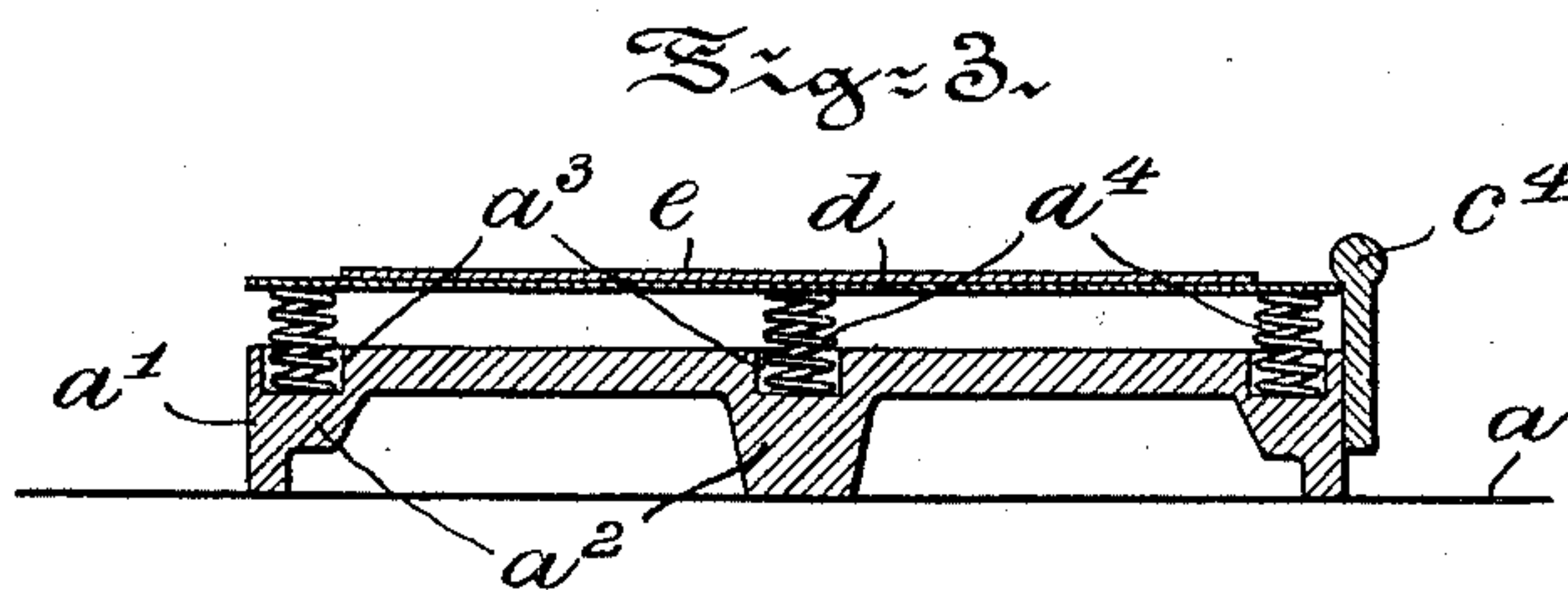
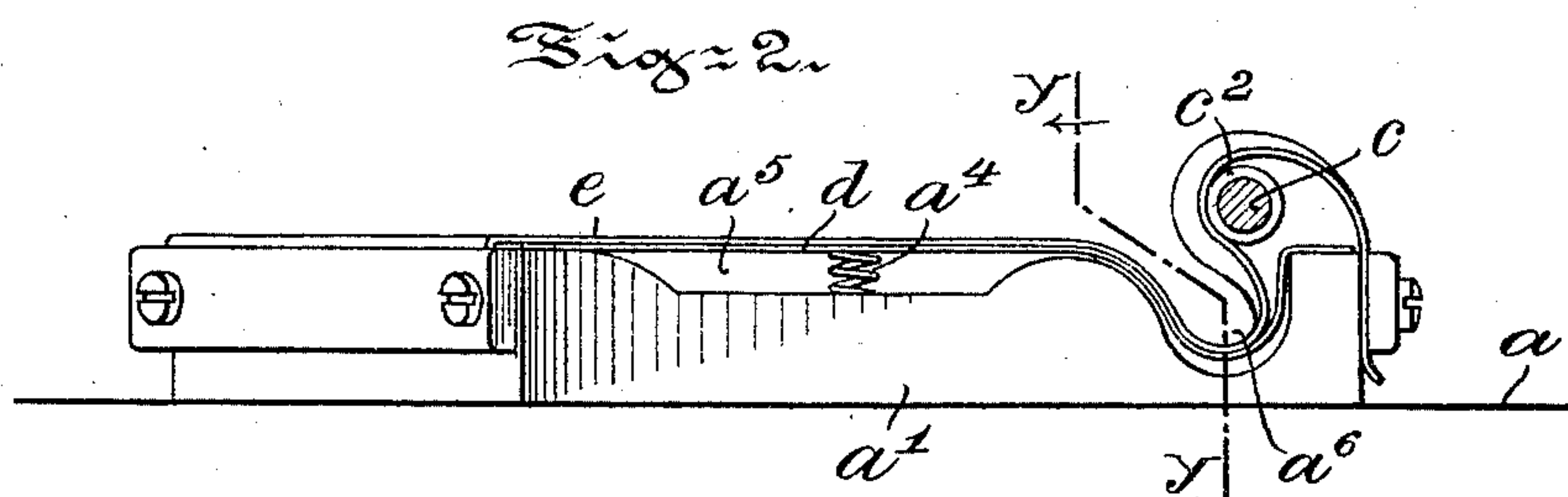
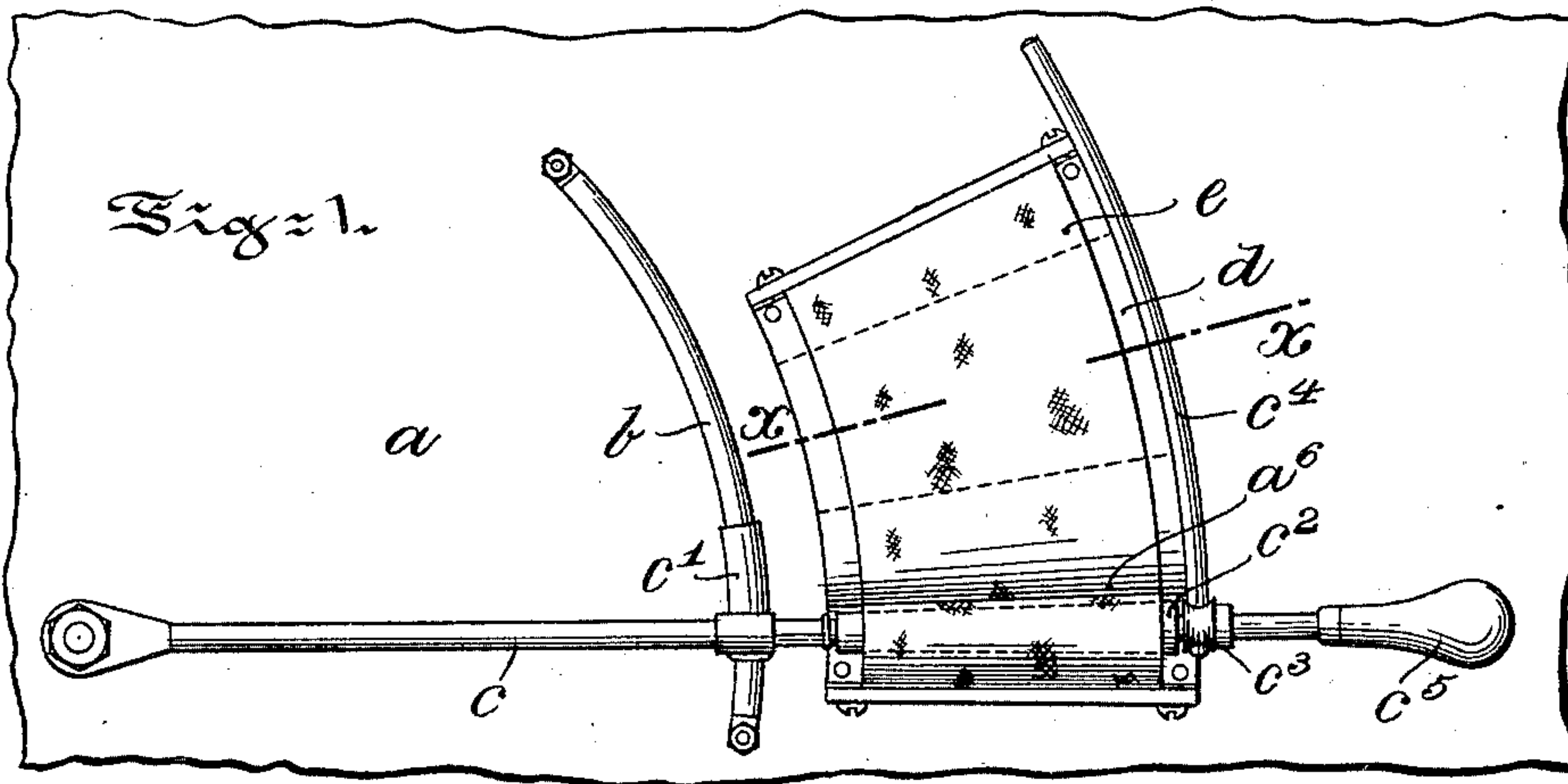
No. 707,536.

Patented Aug. 26, 1902.

G. W. ARNOLD & W. M. CRANSTON.
CIGAR BUNCH ROLLING MACHINE.

(Application filed June 12, 1902.)

(No Model.)



389 witnesses:
Wilhelm Vogt
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UNITED STATES PATENT OFFICE.

GEORGE W. ARNOLD AND WILLIAM M. CRANSTON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNORS OF ONE-THIRD TO JOSEPH E. LUTZ, OF PHILADELPHIA, PENNSYLVANIA.

CIGAR-BUNCH-ROLLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 707,536, dated August 26, 1902.

Application filed June 12, 1902. Serial No. 111,284. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. ARNOLD and WILLIAM M. CRANSTON, citizens of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have jointly invented certain new and useful Improvements in Cigar-Bunch-Rolling Machines, of which the following is a specification.

10 Our invention has relation to certain improvements in machines for forming the bunch of filler to constitute the internal body of the cigar, and in such connection it relates to the particular construction and arrangement of the table upon which the bunch of
15 filler is caused to assume form to become the internal body of the cigar after application of a wrapper thereto.

The principal objects of our invention are,
20 first, to provide a comparatively simple, durable, and effective spring balanced or cushioned table supported in position from a bed whereby a bunch of filler in assuming form is bunched together uniformly or evenly
25 throughout the shaped body of the same to insure uniform drawing of the resultant article when it has assumed its finished condition as a cigar and not so compactly or irregularly as that free drawing and free burning of the cigar are prevented, as heretofore, which depreciated the commercial value of the cigar, because in some portions the filler was too tightly and closely bound together, while in other portions it was soft and irregular or unshapely, and, second, to provide
35 cigar-bunch-rolling machines of the types of the United States Patents No. 670,574, of March 26, 1901, No. 345,614, of July 13, 1886, and No. 416,912, of December 10, 1889, with
40 a spring balanced or cushioned table supported from a stationary bed for bunching a filler to become the internal bound-together body of a finished cigar after an inclosing wrapper has been suitably applied thereto.

45 Our invention, stated in general terms, consists of a spring balanced or cushioned table for a cigar-bunch-rolling machine constructed and arranged in the manner hereinafter described and claimed.

The nature and characteristic features of 50 our invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, in which—

Figure 1 is a top or plan view of a cigar-bunch-rolling machine provided with a spring 55 balanced or cushioned table supported above a solid bed embodying the particular features of our present invention. Fig. 2 is a side elevational view, enlarged and partly sectioned, 60 of a cigar-bunch-rolling machine, showing in detail the arrangement of the spring balanced or cushioned table. Fig. 3 is a cross-sectional view, enlarged, on the line *xx* of Fig. 1; and Fig. 4 is a similar view on the line *yy* of 65 Fig. 2.

Referring to the drawings, *a* is a table-top upon which is mounted a recessed stationary bed *a'*, provided with a series of legs *a²*, projecting therefrom onto the said top *a* and having 70 in the upper surface a series of pockets or sockets *a³*, forming bearings for a series of helical or coiled springs *a⁴*.

b is a segmental guide or bar supported above the table-top *a* and suitably connected 75 with the same.

c is an operating-arm pivotally connected at one end to the table-top *a* and carrying a traveler bushing or bearing *c'*, slidable along the guide or bar *b*. The arm *c* carries a tapering bunch-roller *c²*, a grooved roller *c³*, 80 adapted to travel along a segmental track *c⁴*, and also an operating-handle *c⁵*.

d is preferably a thin metal sheet spanning the series of springs *a⁴*, projecting upward at 85 suitable distances apart from the recessed stationary bed *a'*, the respective ends of the metal sheet being secured to said bed at one end to the left beyond the recess *a⁵*, provided therein, and at the other end to the right beyond a substantially semicylindrical depression *a⁶*, in which the bunch of tobacco is 90 formed preparatory to rolling into its required shape by a flexible apron *e* through manipulating the roller *c²* to bring the mass together into a uniform and even condition 95 with a binder surrounding the internal mass of tobacco so shaped. The flexible apron *e*

is secured to the respective ends of the bed *a* of the machine, as clearly illustrated in Figs. 1 and 2.

Hitherto in such type of machines as illustrated, for example, in the Patent No. 670,574, of March 26, 1901, with a solid bed upon which the bunch of filler was formed by a rolling operation, practice has demonstrated that the filler when bunched and bound and wrapped to complete the cigar was so compactly bound together as to prevent in many instances free drawing as well as burning of the cigar. This of course lessened the value of the cigar and has been found to be due to want of uniformity in the tension of the table during the operation of making the cigar by too closely compacting the mass rather than bunching uniformly and evenly, as is done by the use of the table *d*, arranged according to our invention, whereby uniform tension is maintained not only during the formation of the bunch in the substantially semicylindrical depression *a*⁶, but also during the entire rolling operation, and especially over that portion of the table *d* above the upper recessed portion of the bed *a* subject to greatest pressure in the rolling action of the roller *c*², adapted to manipulate the apron *e* over the table to bunch the filler together and bind the inclosed bunched tobacco, as will be clearly understood from Fig. 2 of the drawings.

Having thus described the nature and objects of our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A cigar-bunch-rolling machine provided with a stationary bed having a recess and a substantially semicylindrical depression, a series of springs supported in vertical position from said bed, a sheet supported by said

springs and secured to said bed and forming a spring balanced or cushioned table, an apron secured by its ends to said table, and means for manipulating said apron on said sheet within said depression and over other portions to bunch and roll a filler material, substantially as and for the purposes described.

2. A cigar-bunch-rolling machine provided with a stationary bed having a recess and a substantially semicylindrical depression, and legs in which are mounted helical or coiled springs, a metal sheet spanning the recess and depression of said bed and supported under uniform tension by said springs, an apron secured at both ends to said bed and a roller for manipulating said apron on the sheet within the depression of said bed and over other portions of said table, substantially as and for the purposes described.

3. A cigar-bunch-rolling machine provided with a stationary bed having a depression, a series of springs projecting from said bed, a thin metal sheet secured to said bed and supported by said springs in position under uniform tension, an apron secured at both ends to said bed, and a traveler-roller adapted to roll a mass of filler material in said depression under spring tension into a uniform or even bunch, substantially as and for the purposes described.

In testimony whereof we have hereunto set our signatures in the presence of two subscribing witnesses.

GEORGE W. ARNOLD.
WM. M. CRANSTON.

Witnesses:

J. WALTER DOUGLASS,
THOMAS M. SMITH.