

(No Model.)

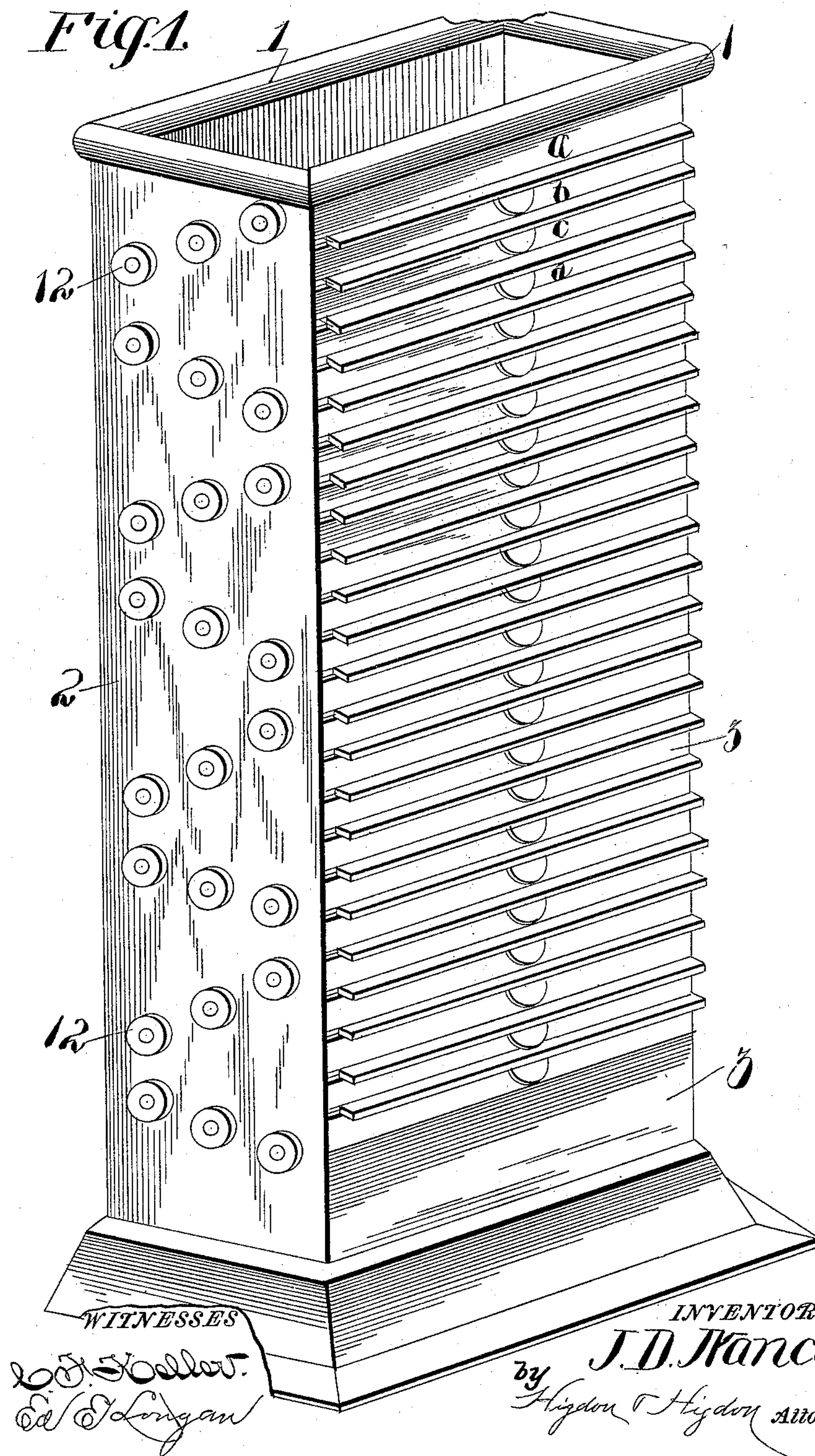
2 Sheets—Sheet 1.

J. D. NANCE.
ROLLER INDEX.

No. 466,619.

Patented Jan. 5, 1892.

Fig.1.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

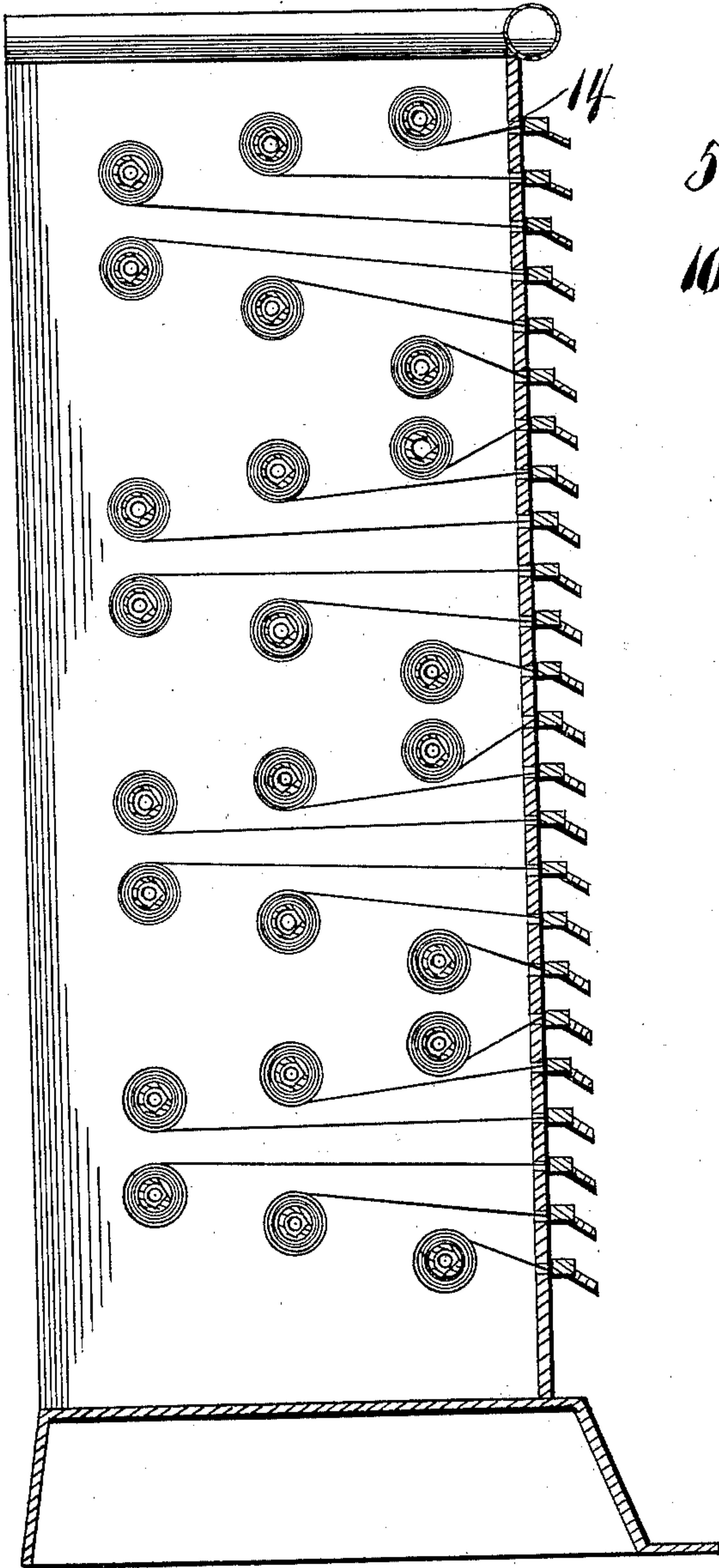


Fig. 3.

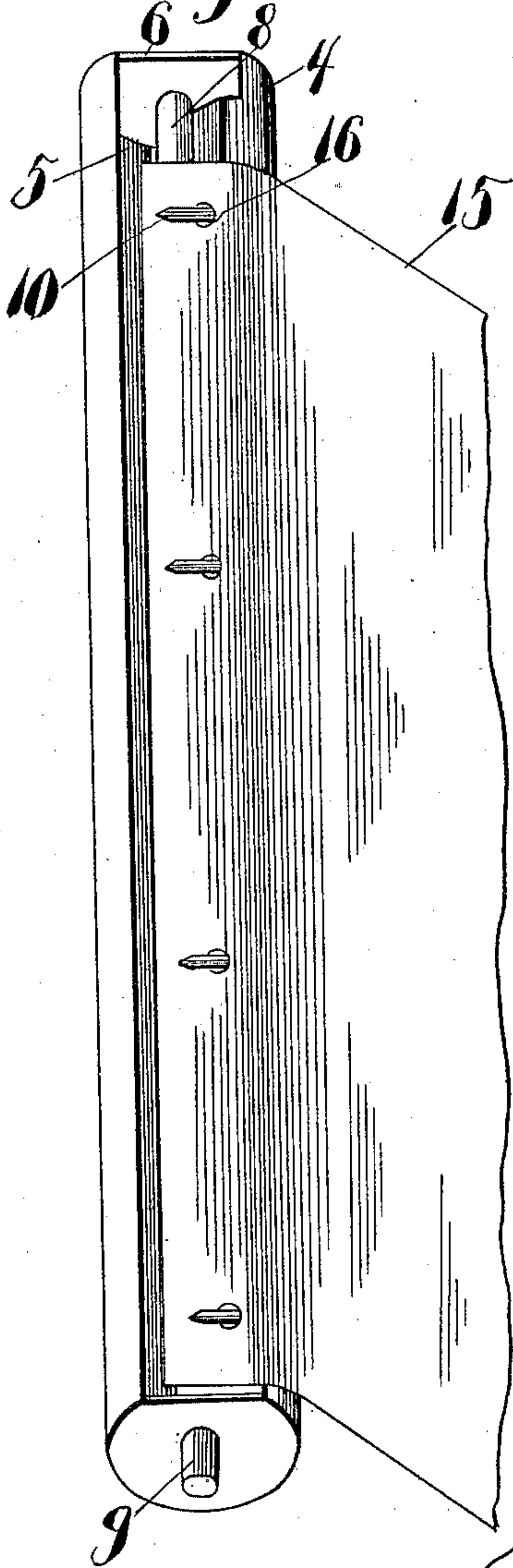
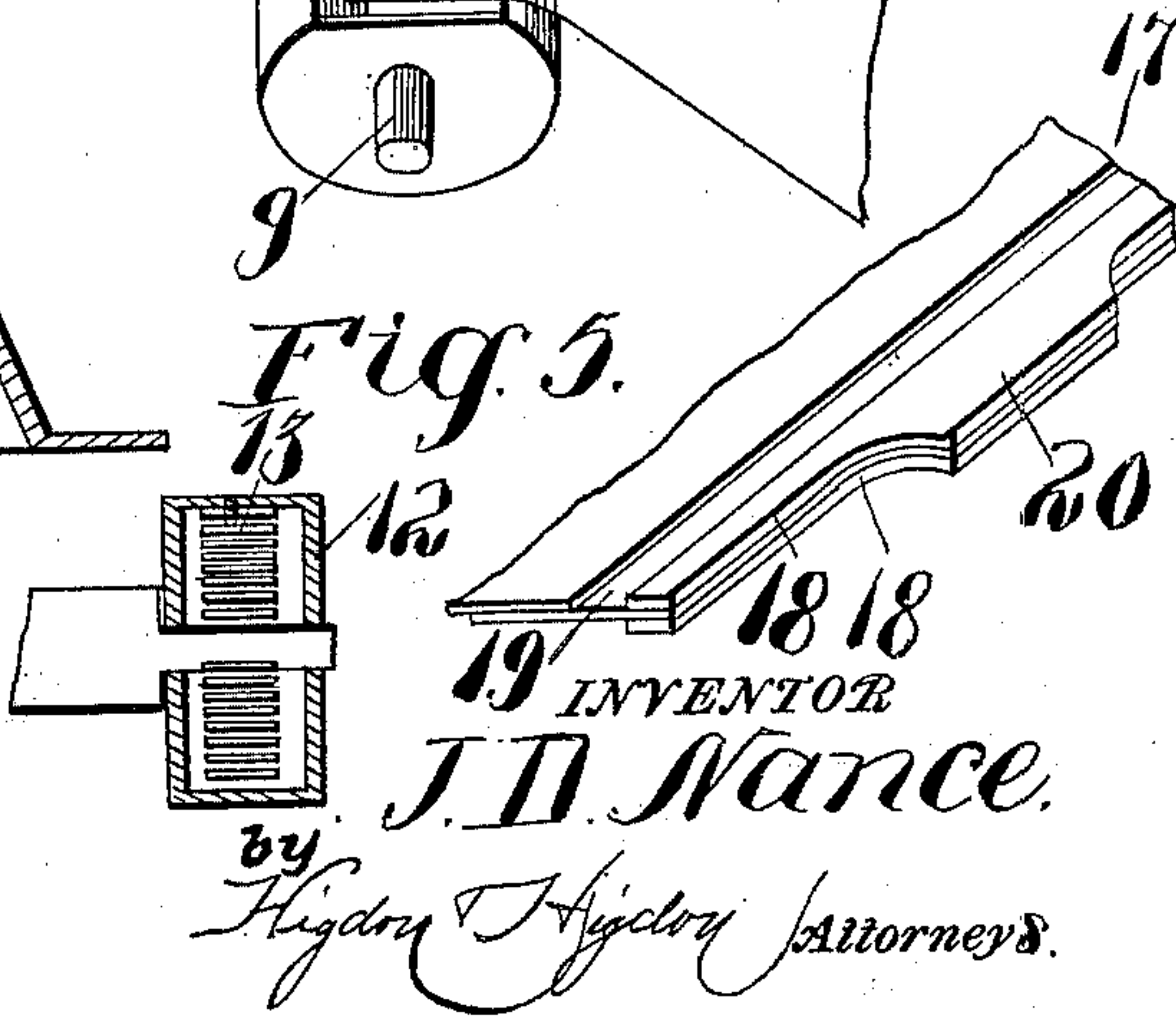


Fig. 4.

WITNESSES

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Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN D. NANCE, OF HUNTSVILLE, TEXAS.

ROLLER-INDEX.

SPECIFICATION forming part of Letters Patent No. 466,619, dated January 5, 1892.

Application filed July 6, 1891. Serial No. 398,506. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. NANCE, of the city of Huntsville, in the county of Walker and State of Texas, have invented certain new and useful Improvements in Combined Spring-Rollers and Cabinet for Ledger-Index Sheets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in combined spring-rollers and cabinet for ledger-index sheets; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described and designated in the claims.

In the drawings, Figure 1 is a perspective view of my complete invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a perspective view of one of the rollers, showing the manner in which the ledger-index sheet is secured to the same. Fig. 4 is a diametrical section of the boxing for the springs which actuate the roller, and also a transverse section of the spring; and Fig. 5 is a perspective view of a stiffening-strip, which is secured to the front edge of the ledger-index sheets, showing said stiffening-strip provided with a thumb-piece.

The object of my invention is to construct a spring-roller for automatically winding up ledger-index sheets and also to construct a suitable cabinet in which said roller may be properly located and mounted.

It may be prefaced in this connection that the ledger-index sheets, as well as the other parts of my invention, may be constructed of various sizes without departing from the nature of my invention.

It may be furthermore observed in the prefacing remarks that my invention is especially designed for the convenience of book-keepers, and the cabinet in which the spring-rollers and ledger-index sheets are located may be fastened in any suitable and mechanical manner to the desk in front of the book-keeper and thereby afford a ready reference to this ledger.

I will further describe the utility and operation of my invention in connection with a mechanical description thereof.

Referring to the drawings, 1 indicates a cabinet in which the spring-rollers are located, said cabinet being provided with sides 2 and with a front face 3.

The cabinet 1 may be constructed in any suitable and mechanical manner and may be decorated with any desired and beautiful design, depending upon the mechanical skill and taste of the manufacturer or workman.

Having given a general outline of the construction of cabinet, I will now describe the construction of the spring-rollers and the manner in which the same are mounted in the sides 2 of the cabinet 1.

Referring to Fig. 3 for the construction of the spring-rollers, 4 indicates the spring-roller. As the construction of all the rollers is the same, I will confine myself to the specific description of only one of them, and as all the rollers are similarly mounted in the sides 2 of the cabinet 1 I will confine myself to the description of the mounting of only one of said rollers. The roller 4 is provided with a U-shaped longitudinal recess 5, which extends almost throughout the entire length of said roller. It may be noted in this connection that the roller 4 is stamped out of any suitable sheet metal by means of any appropriate machinery designed for that purpose, and is provided with end pieces 6, which are secured to said roller in any suitable and mechanical manner. Said end pieces or plates 6 are provided with suitable perforations, through which a shaft 8 may be inserted. The end pieces 6 and consequently the roller 4 are rigidly mounted on said shaft 8. The shaft 8 projects beyond the ends or face-plates 6 and forms trunnions 9.

Located on and projecting from one side of the longitudinal U-shaped recess 5 are a series of attenuated hooks 10 of the construction, as illustrated in Fig. 3.

Having fully described the construction of the rollers 4, around which the ledger-index sheets are wound, I will now describe the manner in which said rollers are mounted in the sides 2 of the cabinet 1. It may be noted that the sides 2 of the cabinet 1 are provided with suitable perforations, in which the trunnions 9 may be inserted, and are free to rotate therein.

I will now proceed to describe the construction by which the rollers are actuated by springs, referring to Figs. 1 and 4 for illustration.

Secured to one of the sides 2, in any suitable and mechanical manner, are a series of boxes 12, corresponding to the number of roll-

ers, and as the construction of all the boxes are the same, as well as the springs located therein, I will confine myself to the construction of only one. The box 12 is provided with a perforation, through which the trunnion 9 may pass. Located in each box is a volute spring 13, one end of which is secured to said box in any suitable and mechanical manner, and the other end thereof likewise secured to the trunnion 9. From this construction, when the roller 4 is rotated in the direction of the coil of the volute spring 13, the elasticity of said spring will automatically rotate said roller in an opposite direction when left free to rotate.

Having described the construction of the rollers, the manner in which the same are mounted in the cabinet, and the springs for retracting the same automatically, I will now proceed to describe the location of said rollers relative to each other, referring to Figs. 1 and 2 for illustration. Referring to said figures, it can be readily perceived that the rollers are located or mounted in the sides 2 in the form of a triangulation—that is, referring to the top series, they are arranged at an angle relative to the next lower or second section, and the next lower or second section from the top is arranged at an angle relative to the third series, and so on throughout. By this location the ledger-index sheets mounted on said rollers are prevented from coming in contact and rubbing each other.

Having fully described the construction of the rollers, the manner in which the same are mounted, the location of the same, and the springs for automatically retracting the same, I will now proceed to describe the construction of the ledger-index sheets, the manner in which they are mounted upon the rollers, or rather secured to the rollers, and the stiffening-strips secured to said sheets, the same being provided with a thumb-piece for pulling out said sheets for inspection by the book-keeper. It may be noted in this connection that the front face 3 of the cabinet is provided with a series of longitudinal slits 14 for the passage of the ledger-sheets, the number of ledger-sheets corresponding to the number of letters of the alphabet and the number of longitudinal slits 14 corresponding to the number of ledger-sheets. By forming slits 14 in the front face 3 of the cabinet a series of strips *a b c d*, &c., are formed, corresponding to the number of letters of the alphabet.

As the construction of all the ledger-index sheets is the same and the manner of securing all the sheets to the rollers is likewise the same, I will only describe the construction of one ledger-index sheet and the manner in which it is secured to the roller 4, referring to Fig. 3 for illustration.

15 indicates a ledger-index sheet. The same may be made out of any suitable material, such as tracing-linen, parchment-paper, &c. Said ledger-index sheet 15 is provided

in its rear portion with a series of perforations 16, through which the attenuated hooks 10 may be inserted. For convenience conceive said sheet 15 to bear all the names that begin with A and to be mounted on the top roller, as seen either in Fig. 1 or 2, and the next index-sheet bear all the names that begin with B and mounted on the roller adjacent to the one just referred to, and so on throughout the entire series of ledger-index sheets. It may be noted in this connection that when one ledger-index sheet is worn out the same can be readily removed and another new one placed in lieu thereof.

I will now proceed to describe the stiffening-piece for the sheets, which I desire to employ in carrying out my invention, the same being illustrated in Fig. 5.

17 indicates said stiffening-piece, which consists of two plates 18 of rigid material, and between said pieces 18 any flexible substance—such as 19—may be secured in suitable and mechanical manner, and said flexible substance 19 may be secured to the front portion of the ledger index sheet in any suitable and mechanical manner. The pieces 18 are provided with projections or thumb-pieces 20.

Having fully described my invention, what I claim is—

1. The combination, with a casing and spring-retracted rollers mounted therein, of index-sheets wound upon said rollers, stiffening-bars 17, provided with thumb-pieces 20, and strips of flexible material secured between said bars and to the outer ends of the index-sheets, substantially as described.

2. The combination of a cabinet 1, provided with sides 2 and a slitted front face 3, the number of slits corresponding to the number of letters of the alphabet, a series of boxes 12, secured to one of said sides 2, volute springs 13, located in said boxes, one of the ends of the same firmly secured to said boxes, a series of rollers corresponding to the number of letters of the alphabet, the same being provided with longitudinal U-shaped recesses 5, a series of attenuated hooks 10, secured to said rollers and projecting from the sides of said recesses, a corresponding number of shafts 8, on which said rollers are rigidly mounted, the trunnions of said shafts being firmly secured to one of the ends of said volute springs 13, and a series of ledger-index sheets, such as 15, corresponding to the number of rollers and alphabetically arranged on said rollers, beginning from the uppermost roller located in the cabinet 1, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN D. NANCE.

Witnesses:

T. C. GIBBS,
H. B. DAVIS.