

(No Model.)

2 Sheets—Sheet 1.

O. CORCORAN.

Mechanism for Assorting Reeds.

No. 237,962.

Patented Feb. 22, 1881.

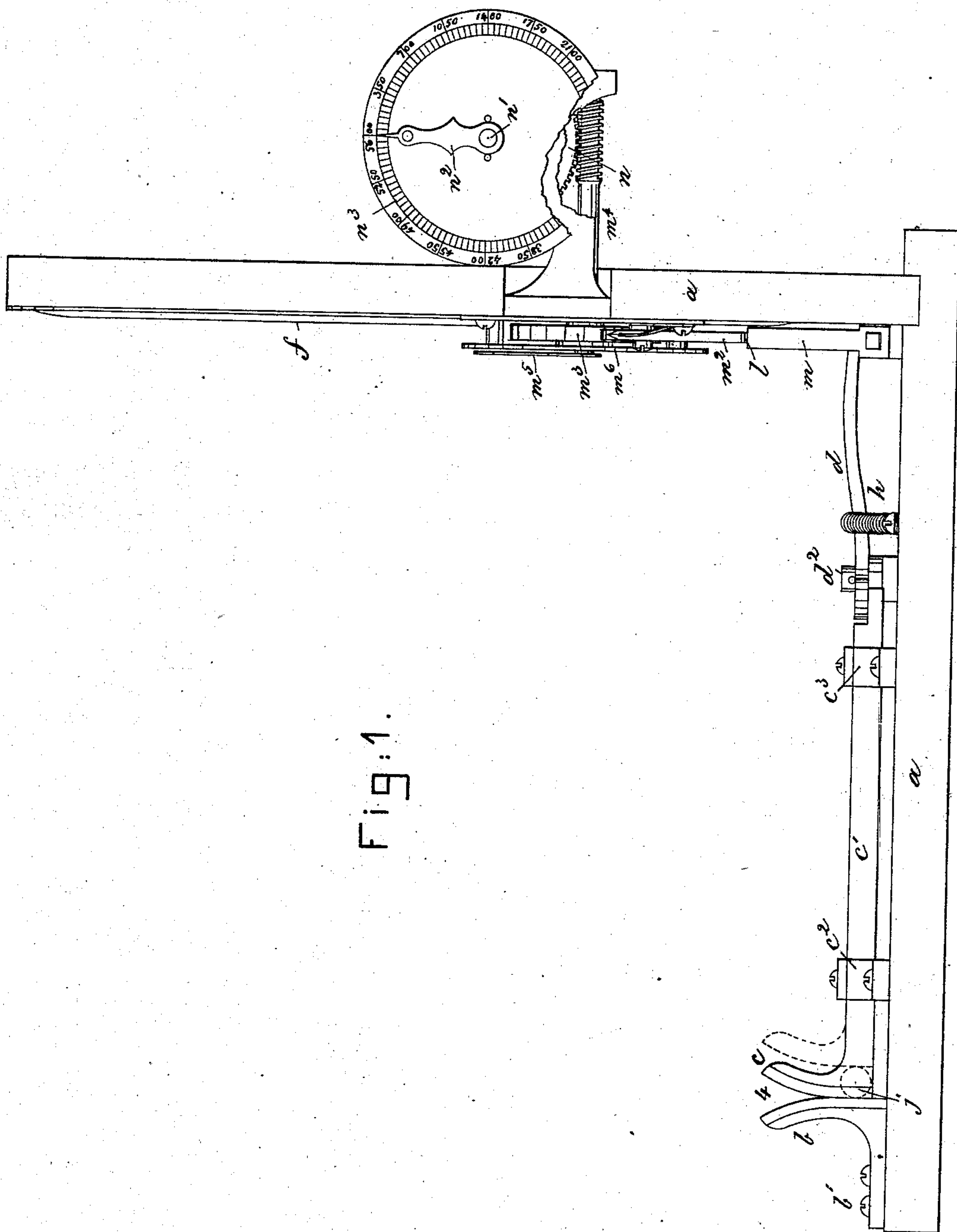


Fig. 1.

Witnesses.

Arthur Reynolds
Bernice J. Noyes.

Inventor.

Owen Corcoran
by Crosby & Gregory Attys

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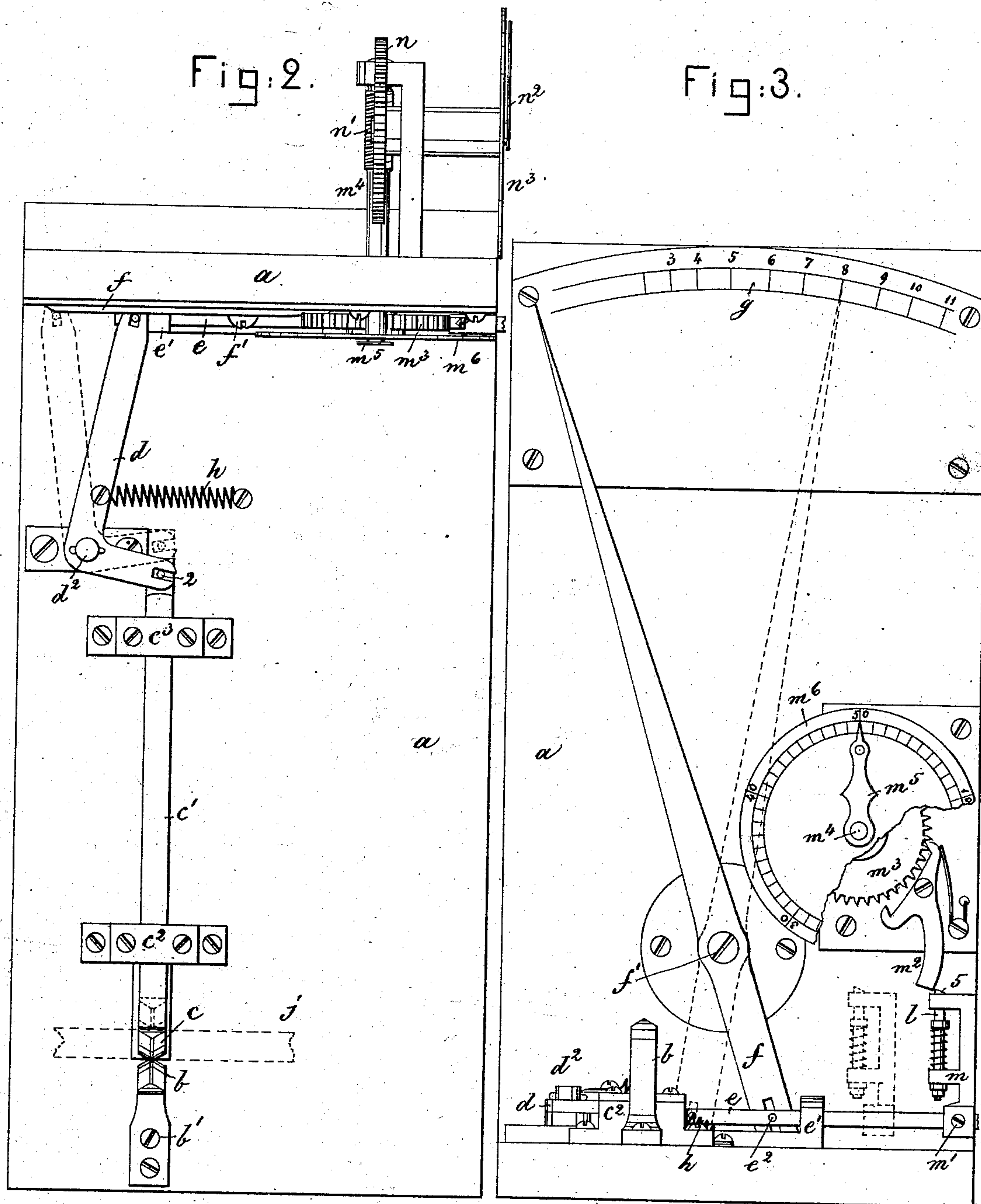
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UNITED STATES PATENT OFFICE.

OWEN CORCORAN, OF WAKEFIELD, MASSACHUSETTS.

MECHANISM FOR ASSORTING REEDS.

SPECIFICATION forming part of Letters Patent No. 237,962, dated February 22, 1881.

Application filed November 11, 1880. (No model)

To all whom it may concern:

Be it known that I, OWEN CORCORAN, of Wakefield, county of Middlesex, and State of Massachusetts, have invented a new and useful Improvement in Mechanism for Assorting Reeds, Canes, &c., of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to and has for its object the production of an organized apparatus by which to assort, as to size, pieces of cane, reed, &c., to be used in various branches of manufacture, wherein it is desired to separate the said pieces and employ them according to their diameter or thickness.

In this apparatus I have employed a fixed jaw, and have opposed to it a movable jaw, leaving between them a tapering space for the reception of the article or thing to be assorted, as to its size, the said article being forced down between the said jaws until it moves one of them as far as the diameter or thickness of the article is capable of doing. This movable jaw is connected by a system of levers and rods with an indicating-finger, which, as the jaw is moved, travels over an index or scale provided with a series of figures or other suitable marks, the finger stopping opposite one of them according to the diameter or thickness of the thing then pressed between the jaws, thus enabling the person who is assorting the canes, reeds, &c., to readily distinguish the size or thickness of each particular reed or cane and place it in its appropriate pile of corresponding-sized reeds or canes. Connected with the apparatus for moving this finger is a pawl-operator having a projection to operate the pawl of a counting mechanism, which, by its movement, indicates or counts one for every time movement of the movable jaws and finger.

Figure 1 represents, in side elevation, in full lines, an apparatus containing my improvements, the dotted lines showing one of the jaws moved as it will be when an article such as a cane or reed has been passed into the space between the jaws. Fig. 2 is a top view of Fig. 1, and Fig. 3 is a view of Fig. 1, looking at it from the left.

In the said drawings, *a* represents the frame-work of the apparatus, it being of suitable

shape to sustain the working parts. The jaw *b* is fixed to the frame-work by screws *b'*, and the jaw *c*, having, as herein shown, a long shank, *c'*, is made movable with relation to the jaw *b*, the shank *c'* of the said jaw sliding in boxes or guides *c² c³*. At its outer end this shank *c'* of the jaw *c* has a pin, 2, or equivalent, which enters a notch in the short arm of an elbow or other suitable connecting-lever, *d*, pivoted at *d²*, and having the end of its long arm joined by a slot-and-pin connection with a sliding bar, *e*, held in suitable guides *e'*, the sliding bar having a pin, *e²*, which enters a slot in the lower end of an indicating-finger, *f*, pivoted at *f'*. The upper end of this finger is arranged to travel backward and forward, as shown by full and dotted lines, Fig. 3, over a scale or index, *g*, having upon it suitable figures or numbers to indicate sizes. The spring *h* exerts a constant pressure or pull on the lever *d*, which tends to keep it in its full-line position, Fig. 2, with the jaw *c* pressed forward in contact with the jaw *b*, the indicating-finger *f* then standing as in full lines, Fig. 3.

The reed, cane, or other thing, *j*, shown in dotted lines, Figs. 1 and 2, of greater or less diameter or thickness, when forced down into the wedging or tapering space 4, (see Fig. 1,) between the fixed and movable jaws *b c*, will force the movable jaw *c* backward for a greater or less distance, according to the diameter or thickness of the reed, cane, or other thing between the said jaws, and will consequently move the indicating-finger *f* a greater or less distance along over the scale *g* toward the right, (see Fig. 3;) but as soon as the jaw *c* has been moved as far as the diameter or thickness of the thing being tested is capable of moving it the movement of the finger stops and indicates to the operator the size of the reed or cane then between the jaws, when the said reed or cane may be removed and placed in its appropriate pile.

Connected with the slide-rod *e'*, for operating the indicating-finger, is an adjustable pawl-operator or projection, *l*, carried in a bracket, *m*, made adjustable by a screw, *m'*, on the said rod *e*. This projection *l* has its upper end beveled or inclined, as at 5, so that when the rod *e* is moved to traverse the indicating-finger to the right over the index it will strike and

turn the pawl m^2 and cause it to turn the ratchet m^3 one tooth; but when the projection passes back from the position shown in dotted lines, Fig. 3, to that shown in full lines, its inclined top will strike against the lower end of the pawl and will be forced down, or will yield and not operate the pawl.

The shaft m^4 , upon which the ratchet m^3 is mounted, has a finger, m^5 , which is arranged to travel over a dial, m^6 , having marked upon it, as herein shown, fifty spaces or units. The shaft m^4 , at its other end, (see Figs. 1 and 2,) has a worm to engage a worm-wheel, n , secured on a shaft, n' , having attached to it a finger, n^2 , adapted to rotate about or over the dial n^3 , marked to indicate units of a higher scale, as hundreds or thousands.

It is obvious that this apparatus may be used to assort, as to size, any cylindrical, square, or strip-like articles, so I do not confine its use to cane and reeds alone, notwithstanding this is one of the particular uses for which I have found the apparatus eminently useful. By the term "strip" I therefore mean to include any strip-like article, whether more or less round or flat in cross-section, and by the said term I intend to include reeds, canes, and other things which can be appropriately assorted, as to diameter or thickness, between the said jaws.

I claim—

1. An organized strip-assorting apparatus, composed, essentially, of the fixed jaw b , the movable jaw c , an indicating-finger, f , and scale g , a lever, d , interposed between the movable jaw and indicating-finger, and positively connected therewith by movable joints, as shown, and a spring connected to said lever to act upon the movable jaw and finger, whereby the movement of the said jaw by a strip interposed between it and the fixed jaw will actuate the finger to indicate the size or thickness of said strip, substantially as described.

2. A fixed jaw, b , movable jaw c , spring-lever d , indicating-finger f , slide e , spring projection l , and a recording mechanism operated thereby, combined, as specified, whereby the size or thickness of a given article is indicated and the number of such articles recorded, substantially as described.

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

OWEN CORCORAN.

Witnesses:

G. W. GREGORY,
ARTHUR REYNOLDS.