E. E. Ramous.

Collar Machine.

No. 43,741. Patented Aug 2. 1864

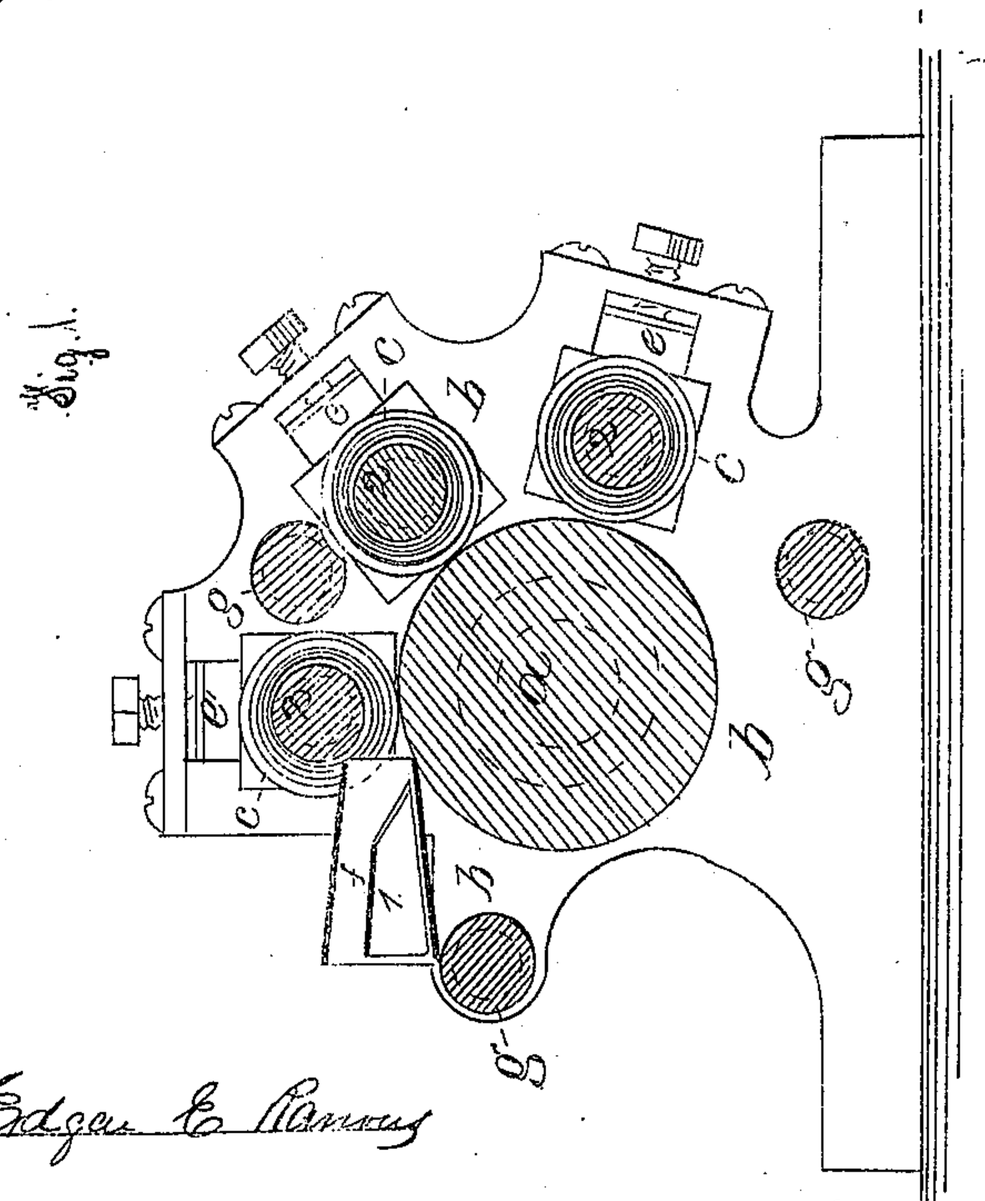

Fig. 1.

Witnesses.

Edgar E Ramous

Samuel W. Senell

Phil. Geo. Harrold

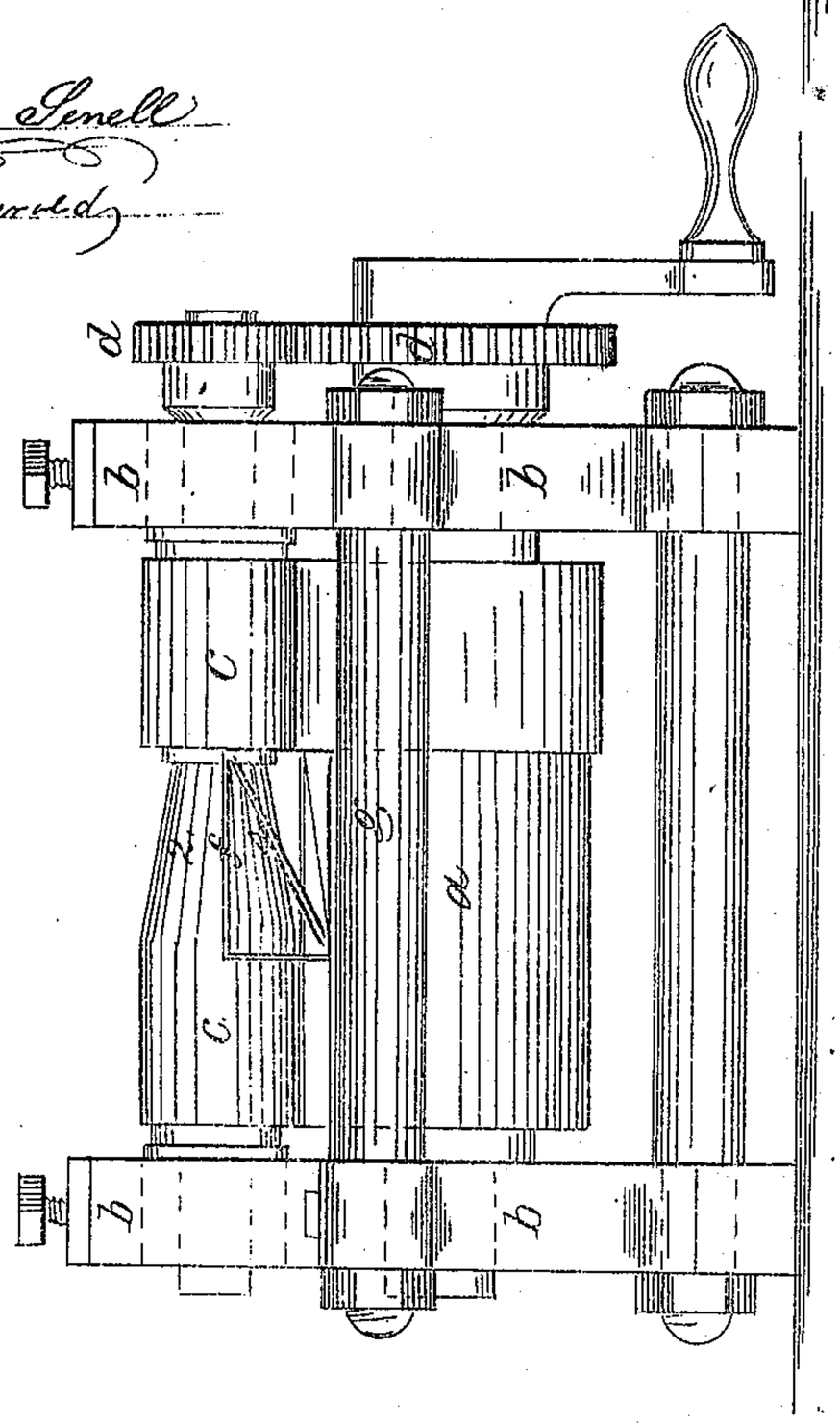

Fig. 2.

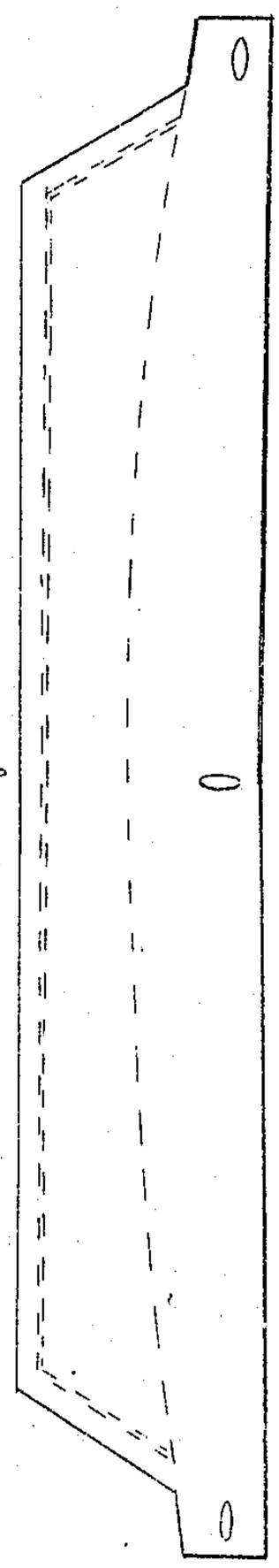

Fig. 3.

UNITED STATES PATENT OFFICE.

EDGAR E. RANOUS, OF NEW YORK, N. Y., ASSIGNOR TO H. B. TAINTER AND F. D. JACKSON, OF SAME PLACE.

IMPROVEMENT IN PRESSING PAPER COLLARS.

Specification forming part of Letters Patent No. **43,741**, dated August 2, 1864.

To all whom it may concern:

Be it known that I, EDGAR E. RANOUS, of the city and State of New York, have invented, made, and applied to use a certain new and useful means for Folding Paper Collars; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a cross-section of the rollers employed by me. Fig. 2 is an elevation of said rollers, and Fig 3 illustrates the shape of collar to which this machine is especially adapted.

Similar marks of reference denote the same parts.

In the manufacture of turned-over paper collars it is desirable to have a sufficient space between the collar and band part to allow for the introduction of a cravat or necktie; hence the collar has to be folded on a curved line that the band may form a cylinder, while the collar itself stands off at its lower edge or is slightly conical.

Collars have heretofore been passed through between rollers acting on the entire surface of the collar and band, in order to fold the collar more closely at the crease or fold, and cause it to set better around the neck without wrinkles or sudden bends; but such rollers are only adapted to compressing the fold of collars where that fold is on a straight line, for in a collar of the shape illustrated in Fig. 3 the collar part is of greater fullness than the band when folded over; hence ordinary rollers would compress folds into the surface of the collar to take up that fullness and spoil the collar.

The nature of my said invention consists in rollers adapted to act only on the fold itself of the collar, and having sufficient space between the rollers where the collar passes to allow the fullness to go through unacted upon; hence the surface of the collar is not injured, and the compression of the rollers applied only at the parts where it is required to flatten and perfect the fold of the collar.

It will be understood that the paper collar is to be cut out by dies in any desired shape, and that the exterior portion is to be folded over upon the band previous to its introduction into my machine, and for this purpose the paper collar may be creased or folded over by hand or to a pattern, or by any suitable mechanism, that forming no part of my invention.

In the drawings, *a* is the main roller, driven by competent power, being supported in the frames *b b*. *c c* are two or more rollers applied around *a* and connected therewith by gearing *d*. *e e* are boxes with rubber or other suitable springs or weights by which the rollers *c c* will be kept toward the roller *a*. *f* is a guide secured to one of the cross-pieces *g*, that connect the frames *b b*. This guide *f* is made with a division, 1, that reaches almost across the box shape forming such guide, so that the said division 1 passes between the parts of the collar and keeps the fold thereof down toward one corner of said guide-box, as illustrated by the red line, Fig. 2. The rollers *c c* are made smaller or conical at the part 2, in order that there may be room for the collar to pass through between the rollers and only be acted upon at the fold itself, as said fold is presented to the rollers by the guide *f*, and the collar cannot work back or sidewise to a point where the rollers will not impinge upon the fold to compress and flatten the same, because the division 1 is in between the fold of the collar.

This apparatus is particularly adapted to collars folded on a curve, but might be used equally well with those folded on a straight line.

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

The rollers, constructed substantially as specified, to act only upon the fold of the collar, in combination with a guide for keeping the collar in its position as presented to such rollers, as set forth.

In witness whereof I have hereunto set my signature this 30th day of May, A. D. 1864.

EDGAR E. RANOUS.

Witnesses:

LEMUEL W. SERRELL,

THOS. GEO. HAROLD.