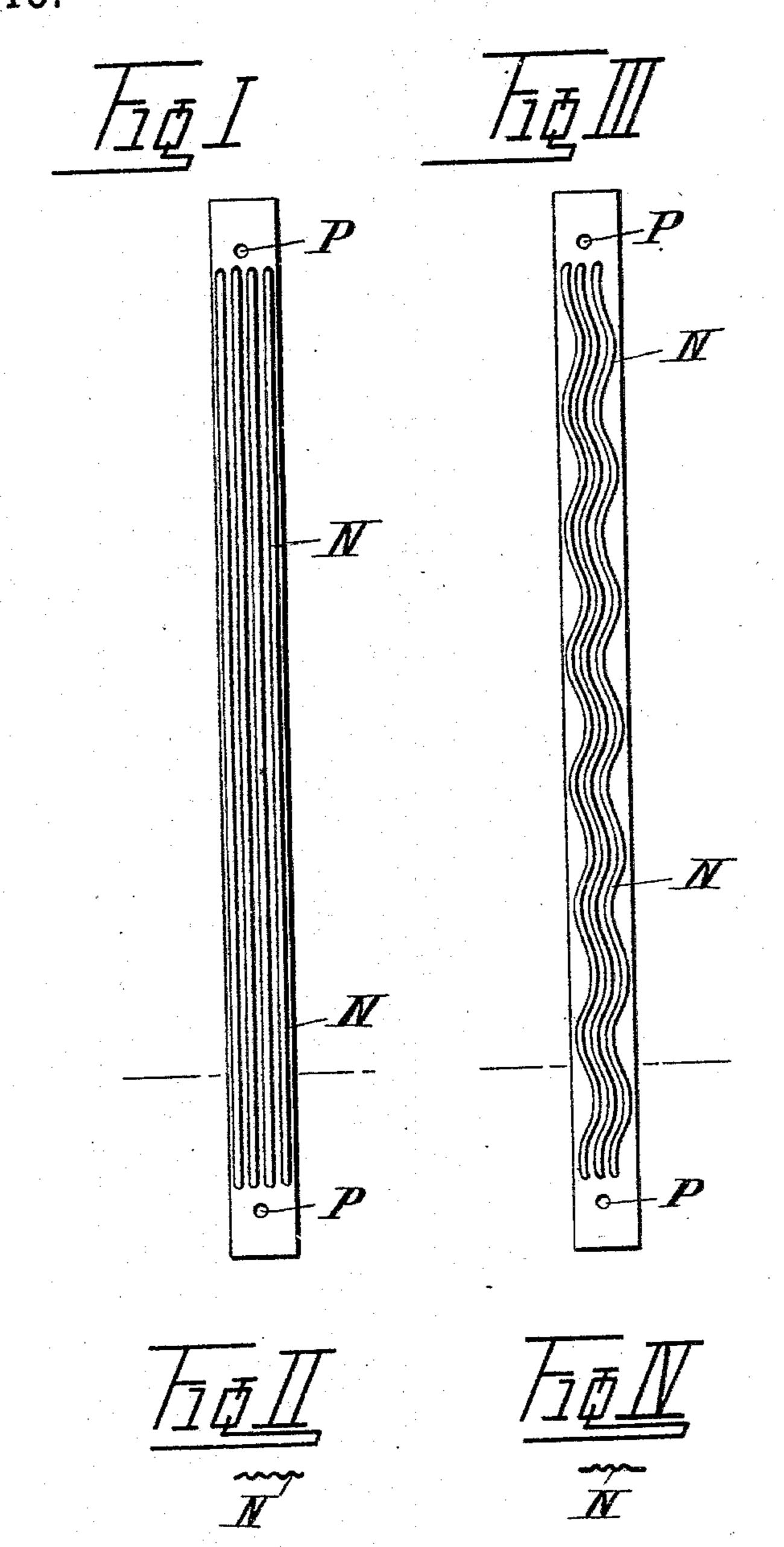
G. ROSENWALD.

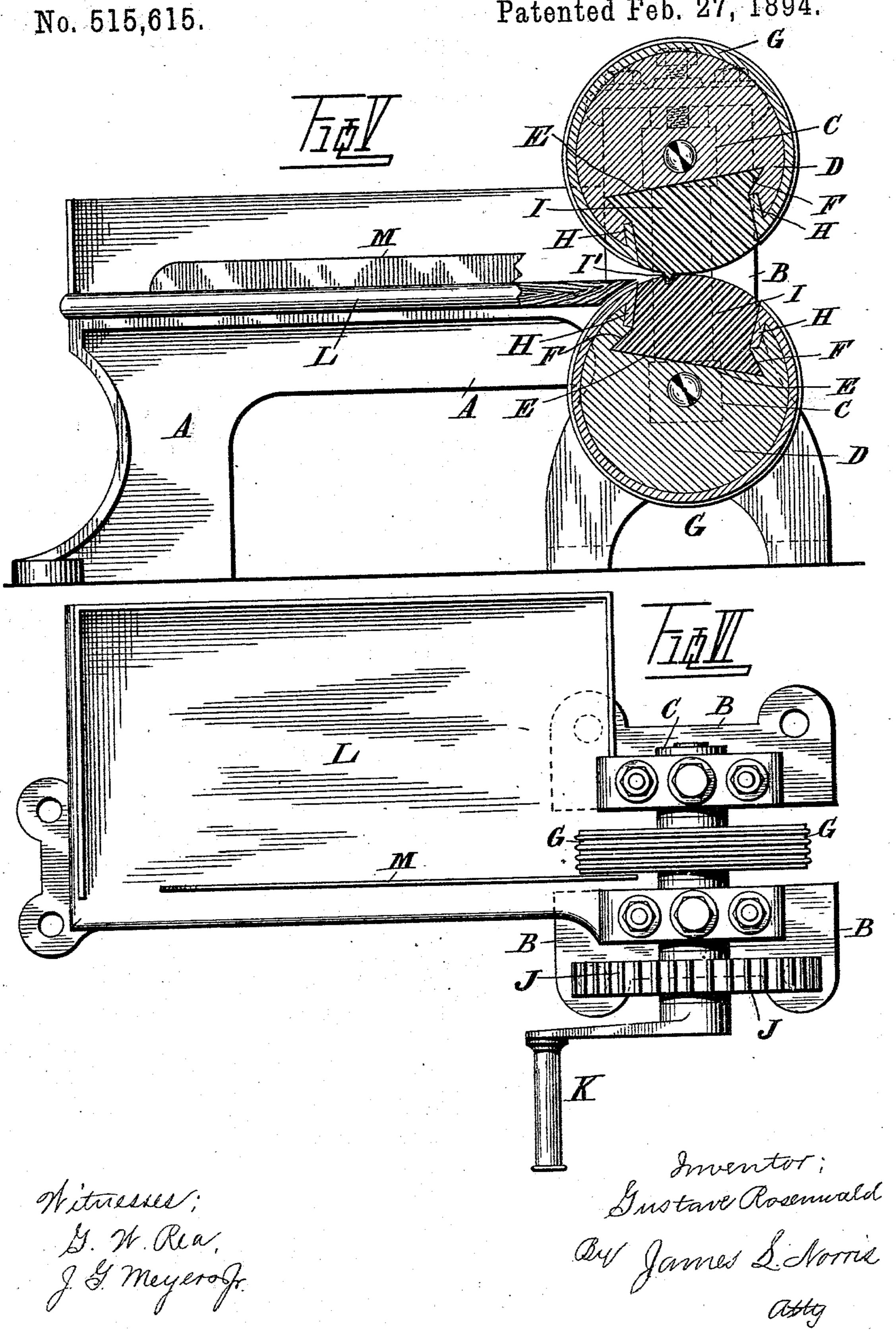
MACHINE FOR CORRUGATING STIFFENERS FOR LADIES' DRESSES, &c. No. 515,615.

Patented Feb. 27, 1894.



Hituesses. J. st. Rea J. G. Meyersof. Sustave Rosenwald By James L. Norrie Atty. G. ROSENWALD.

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## United States Patent Office.

GUSTAVE ROSENWALD, OF LONDON, ENGLAND.

MACHINE FOR CORRUGATING STIFFENERS FOR LADIES' DRESSES, &c.

SPECIFICATION forming part of Letters Patent No. 515,615, dated February 27, 1894.

Application filed June 15,1893. Serial No. 477,694. (No model.) Patented in England March 11, 1893, No. 5,335.

To all whom it may concern:

Be it known that I, GUSTAVE ROSENWALD, a subject of the Queen of Great Britain, and a resident of 27 Noble Street, in the city of London, England, have invented certain new and useful Improvements in Machines for Corrugating Dress-Stays, (patented in Great Britain, No. 5,335, March 11, 1893,) of which the following is a specification.

This invention relates to certain improvements in machines for corrugating whalebone, French horn, metal or other flexible material strips employed as stiffeners in ladies' dresses and other garments in order to obtain greater stiffness and bending resistance with less liability to snap and break during stooping or other motion of the wearer's body.

It consists in the construction, combination, and arrangement of parts hereinafter fully described and finally definitely pointed out in the claims, due reference being had to the accompanying drawings forming a part of this specification.

Figure I of the annexed drawings shows a strip of material with straight corrugations; Fig. II a section of same indicating the corrugations on both faces of the strip. Fig. III, represents a strip with wavy corrugations; Fig. IV section of same. Fig. V shows a sectional side elevation of a machine by which corrugating of strips of semi-hard yet flexible material can be effected; Fig. VI, plan of the machine.

The machine is composed of a frame A with end uprights B, B, having bearings C C for the axles of rollers D D to work in. Each roller has a broad notch E with inclined walls F, F, formed in it for the reception and fixture of an engraved or stamped steel band G to the ends H H of which when the band G is placed around a roller D are slid or sprung into the notch E and hold itself in position.

I is a block of india rubber or wood fitted in the notch to fill it up. The outer surface of the roller projects slightly beyond the periphery of the band when in place to grip the strip and draw it in between them for the impression on the band to be impressed upon it, the two rollers D, D, acting in unison for

that purpose by the gear wheels J. J. when 50 turned by the crank handle K.

L, is a table on which the strips to be impressed can be placed in bulk and on which an attendant can separate them and push them singly against a raised ridge M and 55 then to push each strip in succession under the upper roller.

Each roller D has a rubber or wooden block I fitted in and one of said blocks has a rib I' and the other a recess for the rib I' to enter, 60 said rib forming a stop against which each strip is pushed for entering the rollers D, D when the crank handle K is at the particular part of its travel such as that shown on the drawings. This system of making the rollers 65 with bands and blocks enables the ends of the strips to remain plain as indicated at Figs. I and II, the flutings or corrugations N, N, of plain straight or wavy shape being from and to the portions just within where 70 the holes P, P, are usually made for what is known as fan stitching when the strips are incased in or covered by a fabric in the well known manner.

It will be readily apparent that the steel 75 bands G can be very quickly and easily removed by slipping the ends from out the recesses in the rollers D, D, and replaced by others. Thus the bands for making the straight corrugations shown in Fig. I can be readily 80 removed and replaced by bands for making the waved corrugations shown in Fig. III, and vice versa.

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

1. In a machine for corrugating dress stays, the combination of rollers D, D, provided with recesses E, E, gearing for rotating said rollers in unison, corrugated metallic bands G, G, having their ends turned inwardly and resting in the recesses in said rollers, and blocks I, I, fitted in said recesses, substantially as described.

2. In a machine for corrugating dress stays, the combination of rollers D, D, provided with 95 recesses E, E, gearing for rotating said rollers in unison, corrugated metallic bands G, G, having their ends turned inwardly and rest-

ing in the recesses in said rollers, and blocks I, I, fitted in said recesses, one of said blocks being provided with a rib I' and the other a recess adapted to register with said rib, substantially as described and for the purpose specified.

3. In a machine for corrugating dress stays, the combination of rollers D, D, provided with recesses E, E, having inclined walls F, F, gearing for rotating said rollers in unison, corrugated metallic bands G, G, having their ends turned inwardly and resting in the recesses

in said rollers, and blocks I, I, having dovetailed bases and fitted in said recesses, substantially as shown and described.

In witness whereof I have signed my name, in the presence of two subscribing witnesses, this 5th day of May, 1893.

GUSTAVE ROSENWALD.

Witnesses:

A. BAILEY, 27 Noble St., E. C. ALEX. RIDGWAY,

Not. Pub., St. Michael's Alley, E. C.