

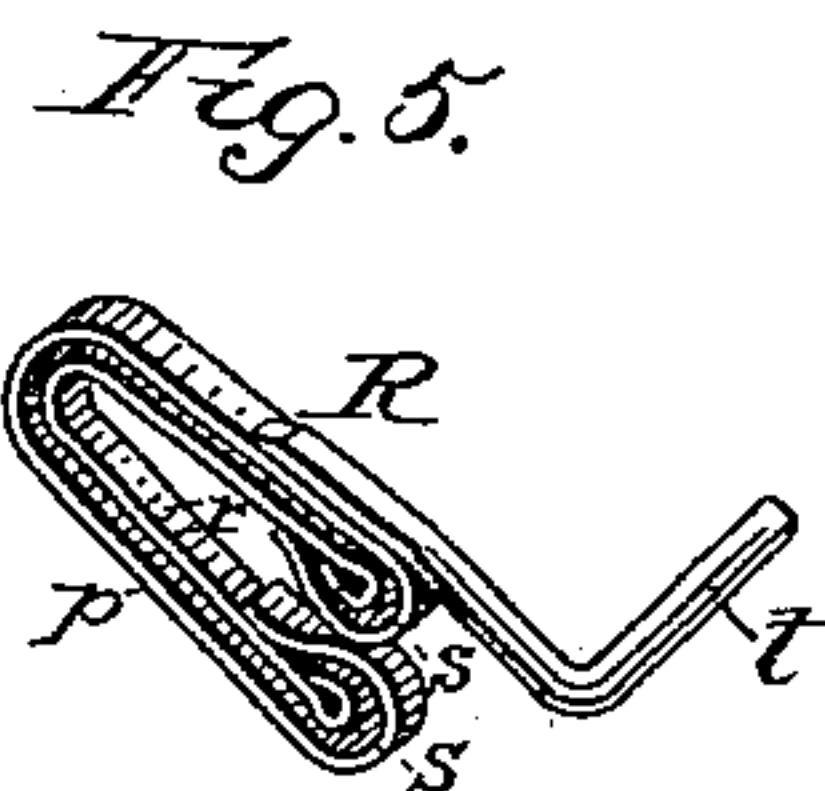
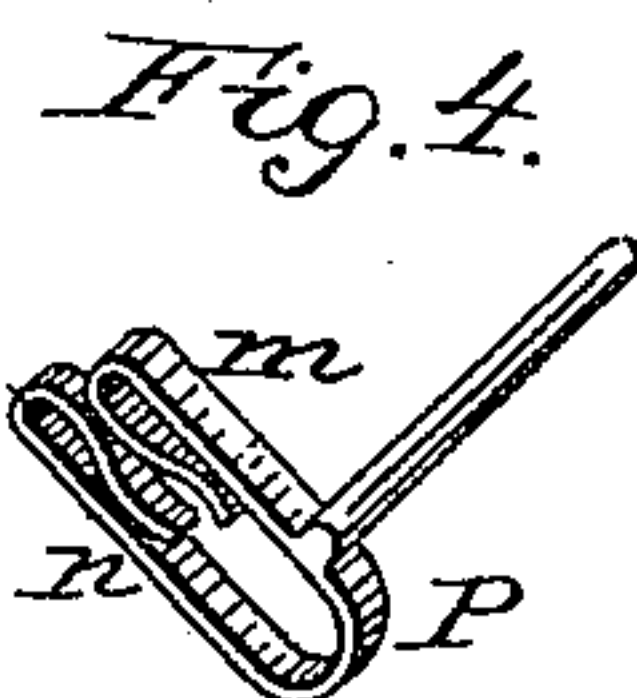
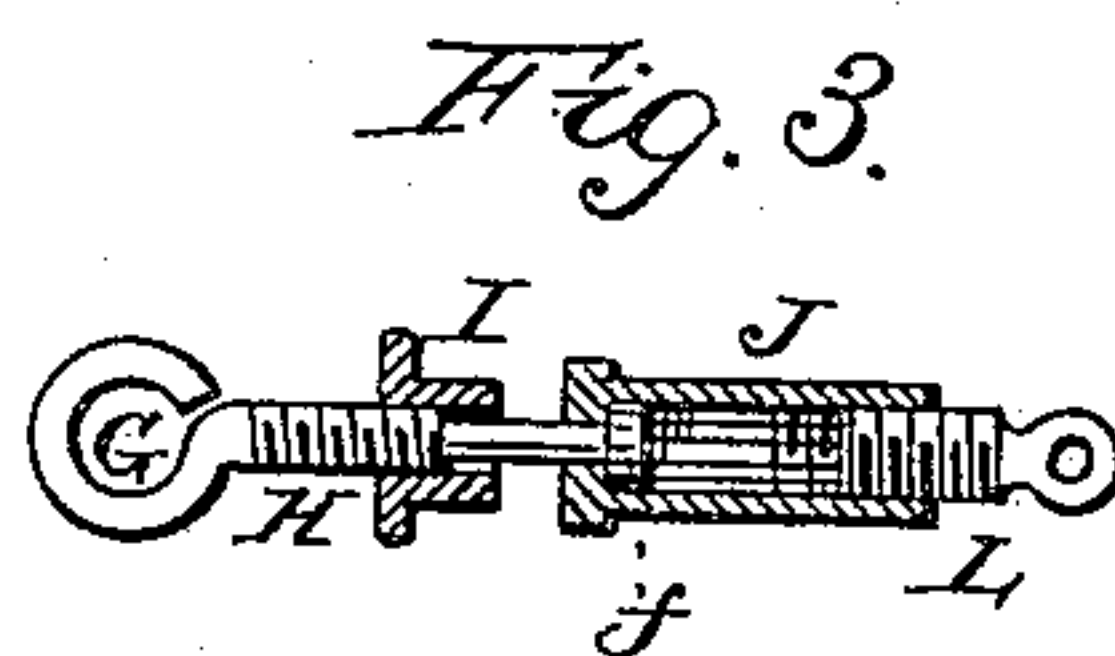
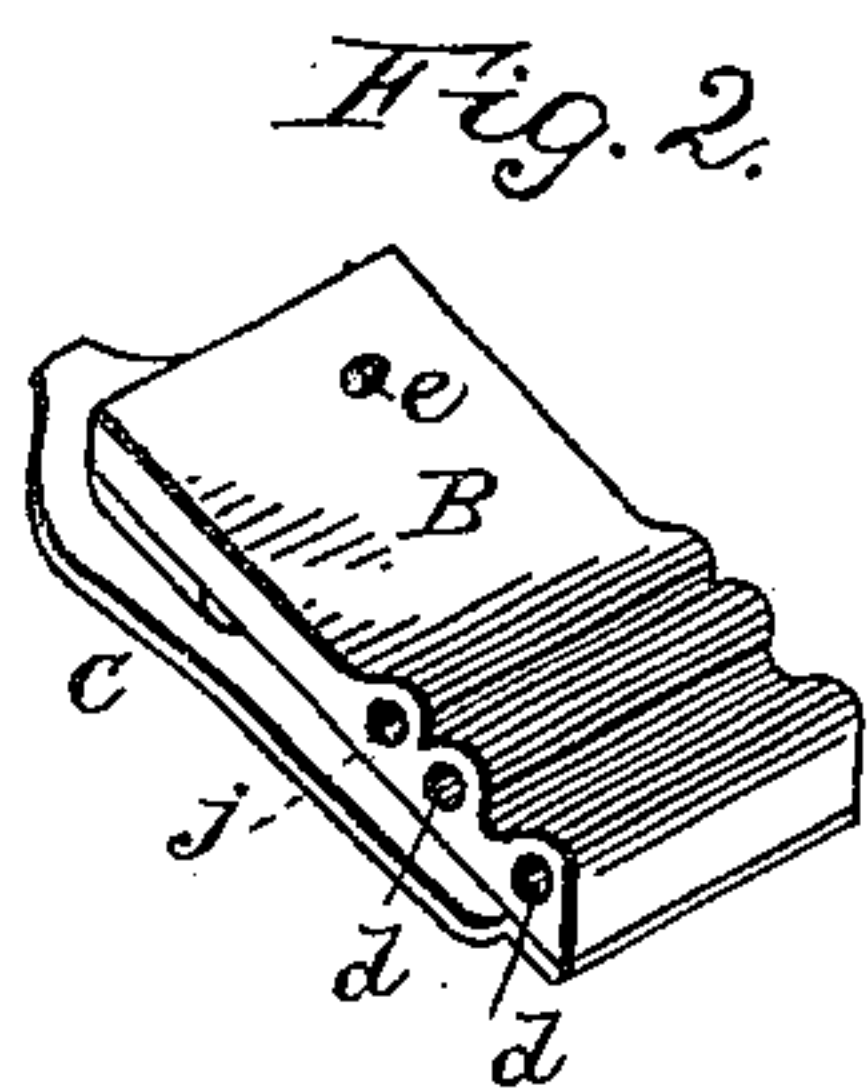
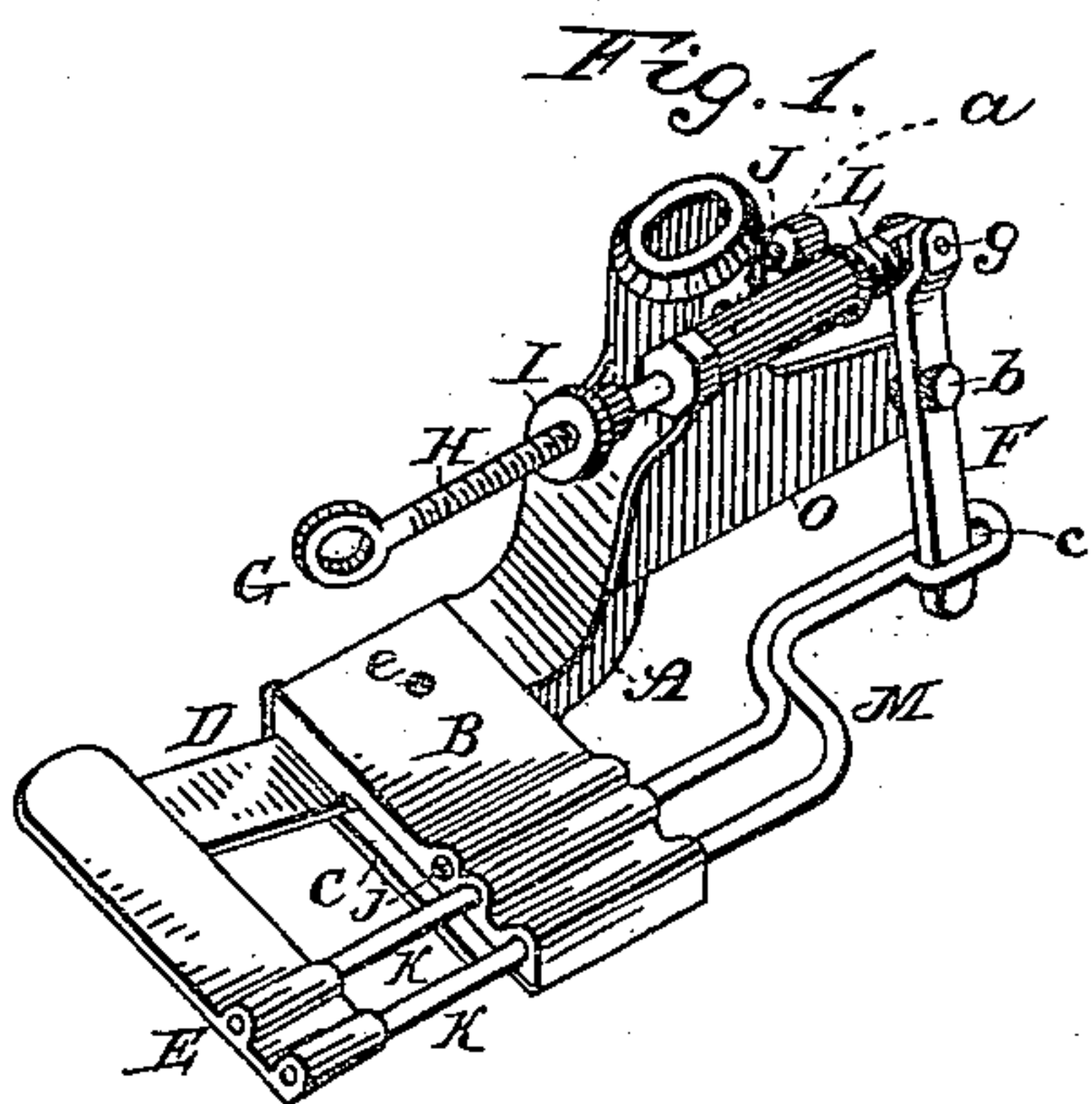
(No Model.)

J. S. SACKETT.

RUFFLING ATTACHMENT FOR SEWING MACHINES.

No. 270,558.

Patented Jan. 9, 1883.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH S. SACKETT, OF PLATTSBURG, NEW YORK.

RUFFLING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 270,558, dated January 9, 1883.

Application filed July 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH S. SACKETT, a citizen of the United States, residing at Plattsburg, in the county of Clinton and State of New York, have invented certain new and useful Improvements in Combined Ruffling, Plaiting, Double-Piping, and Binding Attachments for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in a combined ruffling, plaiting, binding, and double-piping attachment to sewing-machines; and the objects of my improvements are, first, to obtain a more durable, simple, and easily adjusted ruffling and plaiting attachment; second, to obtain a ruffling and plaiting device to which can be readily adjusted a binder and double-piper, making the device a combined ruffler, plaiter, binder, and double-piper. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the device adapted to be attached to a sewing-machine. Fig. 2 is a detailed perspective view of the platform, to which is attached the separating-plate, and through which the wires of the frame to which the ruffling-blade is attached move. Fig. 3 is a detailed sectional view of the adjustable arm, which operates the lever moving the ruffling-blade frame. Fig. 4 is a detailed perspective view of the double-piping device. Fig. 5 is a detailed perspective view of the binding device.

To the presser-foot A is attached at the lower end a platform, B, having on the under side thereof a thin plate, C, one end of which is attached to the platform B, the other end left unattached, so as to permit it to pass readily between and separate the two pieces of cloth when inserted. The platform B has two longitudinal orifices, *d d*, through which the wires K K of the frame M, carrying the ruffling-blade D, move readily, and also the longitudinal orifice *j*, to admit the wire attached to the binder and double-piper attachments; also a

vertical orifice, *e*, for the passage of the needle.

The frame M, that carries the ruffling-blade D, consists of the wires K K and plate E, to which the ruffling-blade D is attached. The wires K K are bent toward the presser-foot, and are brought together, so as to form a slot, *c*, into which the end of the lever F moves.

The presser-foot A has an extension, O, running back, to which the lever F is attached by means of the pin *b*. At the upper end of the lever F is attached, by a pivoted joint, *g*, an adjustable arm, composed of three sections, L, J, and H. The section L, connected with the lever F, is a short threaded rod, which screws into the end of section J. The section J is a cylinder, having a thread cut on the inside of one end, into which section L is screwed, and at the other end an orifice into which the threaded rod H moves, and is provided with a shoulder, against which the nut *f* on the end of the rod H comes in contact to prevent separation. Section H of the adjustable arm is a threaded rod, one end of which plays in the cylinder J, said rod being provided with a nut, as above stated, and a screw thumb-piece, I, to regulate the length of the motion, and terminating in an eye, G, by which it is attached to the needle-bar.

The double-piping device P is constructed as follows: On the end of a piece of wire fitted to enter the orifice *j* of the platform B is a double plate, *m* and *n*, one above the other. The plate *m* or upper plate is bent and curved in upon itself on the under side sufficiently close to hold the goods, while the lower plate, *n*, has the end bent and curved in upon itself on the upper side sufficiently close to press the goods placed in it. The device is so constructed as to bring one end of each plate above and below the ruffling-blade D.

The binding device R is constructed as follows: Attached to a short wire fitting into the orifice *j* of the platform B are two plates, *p* and *r*, bent into the shape of two elongated horse-shoes—one inside the other. The ends of the outer plate, *p*, are bent inward and join the inner plate, *r*, the ends of which pass the junction and are rounded so as to present a smooth surface to the goods. The curved portion of the double plates *p* and *r* when attached to

the platform B is outside of the ruffling-blade D, the two ends of the double plates *p* and *r* passing under and over the ruffling-blade, respectively, and in line with the orifice *e* of the platform B.

The manner of operating the mechanism herein described is as follows: The ruffling attachment is adjusted to the presser-foot bar by means of the thumb-screw *a*, with the ruffler toward the operator. The adjustable arm is attached to the needle-bar by means of the eye G, by which motion is imparted as the needle-bar rises and falls to the lever F. When the needle-bar moves down it pushes the upper end of the lever F back by bringing the cylinder section J of the arm against the thumb-piece I, thereby causing the lower end of the lever in the slotted end of the frame M to move forward, carrying the ruffling-blade D away from the needle, and when the needle-bar passes up it draws the nut *f* of the section H against the shoulder of the cylinder J, causing the lower end of the lever F to move back, carrying the ruffling-rack back, which brings the ruffling-blade toward the needle, and with its serrated blade pushes the goods to be ruffled at a more rapid rate than the goods under the separating-plate. The length of the stroke of the ruffling-blade is regulated by the thumb-piece I, which moves upon the threaded section H, lengthening or shortening the arm as the upward motion of the needle-bar brings the cylinder section J in contact with the thumb-piece I as the rod H slides into the cylinder part. To lengthen or shorten the stroke when the needle-bar passes down, the adjustable arm is shortened or lengthened by turning the cylinder section upon the threaded section L.

The double-piping device P is adjusted by means of the wire fitting into the orifice *j* of the platform B. The strip of cloth for the upper piping is inserted in the curved portion of the upper plate, *m*, of the piping device P, so that the edge of the strip is folded under and passes under the platform B and over the separating-plate C and the goods upon which it is to be sewed. The piping is carried along under the needle with the goods upon which the ruffle and piping are to be sewed, thus enabling the operator to lay the ruffle and piping at the same time. The strip of cloth for the other piping is inserted in the curved portion of the lower plate, *n*, of the piping device P, so that the edge of the strip is folded and passes under the platform B and under the separating-

blade C, and under the goods upon which it is to be sewed, and is carried along with the goods under the needle.

The binding device R is attached to the platform B by means of wire *t*, inserted into the orifice *j*, bringing the rounded portion of the plates *p* and *r* outside the ruffling-blade D, bringing the two ends of the double plates *p* and *r* on a line with the orifice *e* of the platform B.

The piece of goods for binding is inserted between the two plates *p* and *r*, with each edge folded around the rounded ends *s s* of the inner plate. The edge of the goods to be bound passes in between the two arms of the device holding the binding and passes with it under the action of the needle.

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

1. The combination, with the presser-foot, having the extension O, of the platform B, the wire-frame M, constructed to form a slot, *c*, at its rear end, the plate E, carrying ruffling-blade D, the lever F, and the adjustable arm, composed of the sections H, J, and L, substantially as set forth.

2. The frame M, having wires K K, and plate E, carrying a ruffling-blade, in combination with the platform B, having the orifices *d d* for the passage of the wires K K, and orifice *j* for the insertion of the binding and piping devices, substantially as described.

3. The adjustable arm, composed of three sections, H, J, and L, thumb-piece I, and nut *f*, substantially as shown, and for the purposes specified.

4. The combination of the adjustable arm of three sections, H, J, and L, operating a lever, F, with the frame M, carrying a ruffling-blade, substantially as set forth.

5. The combination of the platform B, frame M, carrying ruffling-blade D, with double-piper P, having the double plates *m* and *n*, substantially as described and set forth.

6. The combination of the platform B, frame M, carrying a ruffling-blade, D, with the binder R, having the double horseshoe-plates *p* and *r*, substantially as described, and for the purposes herein set forth.

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

JOSEPH S. SACKETT.

Witnesses:

R. A. DUTTON,
IRVING J. MORRIS.