To all whom it may concern:

Be it known that I, CHARLES M. HALLMAN, of Wyoming, a citizen of the United States, residing at Wyoming, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Paper-Glazing Machines, of which the following is a specification.

This invention relates to flinting apparatus such as is commonly employed for glazing paper, and more particularly to the construction of the polishing bed upon which the coated paper is pressed while being fed forward and subjected to the burnishing action of the transversely reciprocated polishing element. The invention is fully described in connection with the accompanying drawing, and the novel features are specifically defined in the claims.

Means for continuously feeding the coated strip of paper over the polishing bed, and for imparting reciprocating transverse movement, under regulated pressure, to the polishing element, are features common to such apparatus, no specific showing thereof being required for a clear understanding of the present invention the sole object of which is to provide a polishing bed of improved construction and advantageous operation as hereinafter clearly set forth.

Figure 1 is an elevational view of my improved finishing bed, illustrated in connection with a diagrammatic showing of a reciprocating polishing element cooperating therewith; a cross-section of the paper being indicated by a heavy dotted line.

Fig. 2 is a plan view of the same; and Fig. 3 is a cross-sectional view on the line 3-3 of Figs. 1 and 2.

The essential features of well known flinting machine construction are sufficiently indicated by the showing of the machine frame 10 on which is rigidly secured the slightly raised finishing-bed platform 11, and of the transversely reciprocated polishing element 12, which is carried by a long radius arm 13 pivoted to a horizontally arranged spring beam 14 having any suitable means for adjusting the polishing pressure. The specific construction of these parts, and of the paper feeding devices commonly employed, is immaterial to the present invention.

It is well recognized in the art that the paper supporting bed is a source of great trouble and expense not only as to proper maintenance but also in the securing of satisfactory and uniform burnishing effects. Such beds have been commonly formed of most carefully selected and prepared special woods with a view to reliably insuring the desired glazing effect, though composite structures have also been resorted to. In my improved construction I dispense entirely with selected material, avoid the disadvantages incident to the usual heating by constant burnishing action, and provide an advantageously resilient bed, secured by clamping plates adapted to be adjustably set for properly guarding the edges of the treated paper and maintaining the face of the burnishing element in proper operative condition.

Upon the finishing bed platform 11, which is rigidly secured to the horizontal frame surface 10 as usual, I mount a flat spring-bar 20, preferably of ordinary rolled steel, upon the supports 21, 21 on the ends of the platform, so as to raise the bar above the latter and provide a clearance space under the bar as indicated. The upper surface of this spring-bar is covered by a correspondingly shaped strip 22 of thick paper or the like, such as is commonly placed upon the usual wood bed, for immediate contact with the passing material 19. The bar 20 is rigidly secured to the platform 11 by means of bolts 24 passing through the supports 21 and having countersunk heads, as shown; and the paper-contacting strip 23 is clamped to the surface of bar 20 by means of separate clamping screws 28 and clamping plates 25. These plates are made of flat steel of suitable width, having their inwardly extending portions 26, 26 tapered down in thickness, and having longitudinal slots 27, 27 through which the clamping screws 28 pass so that each plate may be adjusted to properly set its end 26 relative to the edge of any width paper treated, before tightening the clamping screw.

In operation the spring bar 20 forms a resilient polishing bed which yields slightly to the burnishing pressure so as to practically equalize the latter and insure a uniform burnishing action. Any heat developed is quickly dissipated without injurious
effect. The accurately set edges 26 of the rigidly held clamping plates 25 carry the polishing element 12 at each extremity of its stroke so as to properly maintain the polishing surface thereof, and insure proper treatment of the edges of the paper. The cost of construction and maintenance is minimized.

What I claim is:

1. In a machine for glazing coated paper comprising a reciprocating flint bar; a yielding paper-supporting bed comprising a fixed platform, a spring-bar having its end portions only fixedly supported by said platform, and a relatively soft paper-contacting strip clamped upon said spring-bar.

2. In a machine for glazing coated paper comprising a reciprocating flint bar, and a paper-supporting bed having a relatively soft paper-contacting strip thereon; a pair of adjustable clamping plates for said strip each having an inwardly extending flint-carrying end, and means for securing each of said clamping plates in variable position upon the paper-supporting bed.

In testimony whereof I affix my signature.

CHARLES M. HALLMAN.