



from the path of the blades on the shear cylinder, by means of a self-operating mechanism which automatically extends or lessens the effective edge of the cloth rest.

The plain steel rest is shown in its outline section in Fig. 3 and in which *A* indicates the rest, *B* the ledger blade and *C* the revolver or shear cylinder (having 14 edge fly blades). The run of the cloth (as shown by means of dotted line in connection with Figs. 1 and 2) has been omitted in this illustration

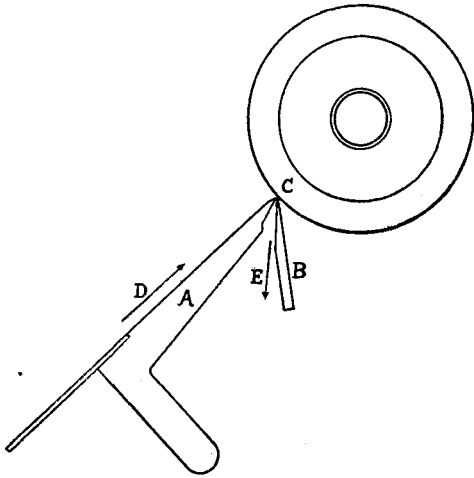


FIG. 3.

for the sake of clearness; the cloth passing in the direction of arrow *D* over the cloth rest, coming under the action of shearing mechanism, where cloth rest,

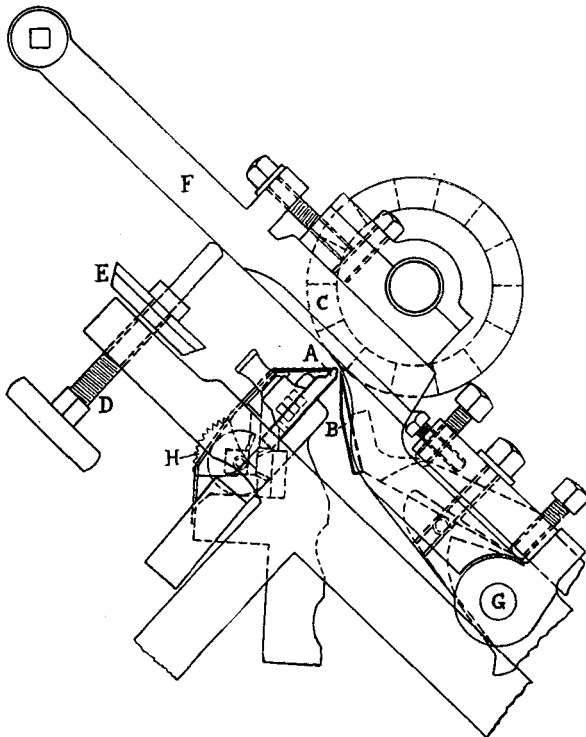


FIG. 4.

ledger blade and fly blades nearly meet, and leaves the shearing mechanism, passing between cloth rest and ledger blade, in the direction of arrow *E*.

The list saving steel rest. An illustration in sec-

tion of this rest, showing also position of ledger blade and shear cylinder to the rest, is given in Fig. 4, and in which *A* indicates the cloth rest proper, *B* the ledger blade, and *C* the shear cylinder (having 14 edge fly blades). *D* indicates the dial screw for setting the shear cylinder nearer or farther away from the cloth rest according to amount of shearing to be done, *E* is the dial, *F* indicates the frame for carrying the shear cylinder or revolver, being pivoted at *G*. The feeler of the list saving attachment is shown at *H*. The passage of the cloth to be sheared (and as shown by dotted lines in Figs. 1 and 2) has also not been shown in this case, in order to better show up the various parts composing this shearing device.

With reference to the setting of this rest, the builders give the following details: Lay the rest centrally right and left in its place on the top end frames. Test its edge, the slides being pulled out of their end positions, with the straight edge and dry tissue paper, both on top of the edge and on the back of the edge toward the blades. It should pinch the paper equally at every point. If there are a few high places and these are slight, they can be worked off with a fine flat file, drawing it lengthwise. If the inaccuracies are considerable, the rest must be trued on a planer. Screw in the binder screw as situated, one screw in each attachment, in about the centre of the latter, loosely. Turn out the two elevating screws as situated, one screw in each attachment, at the bottom of the latter, until the rest is high enough to allow the outer ends of the feeler catch holders, as screwed to the slides, to escape the horns of the top end frames, said slides being in their outermost positions. Turn in the two set screws as situated in each arrangement, one above and one below the binder screw previously mentioned, until the rest is level, right and left on its edge, and also level on its top flat, front to back. When once the rest is set, leave it alone, and in turn adjust the blades of the revolver and under no consideration the rest to the blades. Ordinarily, and for close shearing, the edge of the ledger blade should be brought up exactly level or "at sight" with the top of the rest edge, making this adjustment with the elevating screws of the blade frame pivot boxes on the top of the back end frames. Lower the knife close to the rest edge so it will barely pinch thick letter paper, by turning back the dial screws so the blade frame arms rest evenly on their points. Test this by placing your finger at the junction of the blade frame arm and dial screw point, and hitting the blade frame arm with a light upward blow with the fist of the other hand. The feel of the give, will enable one to adjust it evenly after a little practice. Being assured that the ledger knife is dead true, by testing with the straight edge and dry tissue paper, both on the face and scarf bevel, see if thick letter paper pinches evenly the whole length between the rest edge and the ledger knife. If the paper chances to draw a trifle loosely in the middle, due to the sag of the rest, this can be corrected by turning in the screw driver set screws, one with each attachment—situated just above each binder screw—a little. On heavy-weight face

finish goods, it is often the practice to set the ledger knife edge a little below the rest edge. If the knife edge is set above the rest edge there is danger of pinching the goods, making them fluff up in front of the blades and cut the face. Never run the rest, if the slides work hard, since in such a case the list motion needs either cleaning and oiling or refitting. Don't try and run the rest with worn feeler catches or ratchets, but renew these parts. Keep the list motion free from flocks, dirt, and well oiled. The sheet steel guard in front of the rest and over the flock brush should be straight at its front lower edge and the flock brush should barely touch it.

*(To be continued.)*

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