

internal triangular flap on the bag bottom in case they be made to pass into the tucks; the paper tube being held in the meantime by the presser plate, B. It is insisted, however, that said plates, f, are as likely to pass under the lower division of the tuck as into the tuck; also, that they may pass over the upper division of the tuck, or, in rapid movement, simply pierce and tear the bag blank, and that a like uncertainty is involved in the action of the rod, D; there being no adequate mechanism to control the position of the paper tube while said plates and rod act, even if said rod, D, be in itself a practical means, in any case, of accomplishing the result assigned to it in the patent. The machine described in this patent never came into use. No machine or model was constructed prior to the patent. In 1882 the patentees, it is said, built a machine, which, according to one affidavit, "was run * * * as a successful, operative machine." According to another, paper bags "were manufactured in small numbers, though not for sale, with that machine." I get the impression from the affidavits produced by complainants that the use of said machine, or of any machine made in accordance with the patent, for the purpose of actually manufacturing paper bags for sale, was not even seriously thought of after said experimental machine was constructed. The patentees turned said machine over to two professional inventors, Lorenz and Honiss, in order that the latter might use the same, or any suggestions which might occur to them in connection with it, in "inventing, designing, and constructing," I quote from the affidavit of Lorenz, a commercially operative paper-bag machine. Honiss swears:

"The first machine which we actually built in the course of our paper-bag machine work was completed, and ran admirably at very high speeds, early in 1884; and that machine contained hinged folding plates, each having a beveled inner end, whereby, when the plates were unfolded, said inner ends were adapted to the internal triangular flaps formed in the bag; and those hinged folding plates were carried crosswise of the machine upon arms substantially like the arm, f', of said letters patent No. 242,661; and the lower member of each pair of those folding plates was, in all respects, nearly or quite identical with the lower member of each pair of the hinged folding plates, f, of the said letters patent No. 242,661, except that it was made integral with the arm which carried it, instead of being a separable thing, as shown in said letters patent. But in that machine of 1884 the upper member of each of those pairs of folding plates was a skeleton device, the outline of which was substantially identical with the outline of the upper member of each pair of the hinged folding plates, f, of said letters patent No. 242,661, and which skeleton device was hinged to the lower member in substantially the same way, and on the same line, and for the same purpose, that the upper member of each pair of folding plates, f, is hinged to the lower member in the said letters patent No. 242,661; the difference between the upper members of the folding plates in the said machine of 1884, and the upper members of the folding plates in the said patent No. 242,661, consisting simply in the fact that the interior portion of the flat area of the latter was absent from the plates of the machine of 1884, but the mode of operation and function was the same. So, also, the upper members of the folding devices in the machine of 1884 were folded and unfolded by colliding with fixed stops attached to the frame of the machine, in substantially the same way that the upper members of the hinged folding plates, f, of the said patent No. 242,661, are folded and unfolded."

It is not disclosed how, in this machine of 1884, the tube with tucked-in sides was held while the folding plates were inserted, nor

with what mechanism said plates were connected so that they became operative and serviceable in making the paper bag. It is not stated here that said folding plates were operated in connection with the rod, D, and the presser plate, as in the patent in suit. Honiss says further:

"But the said machine of 1884 was not duplicated, or used as a model from which to build a large number of machines. It was not thus used on account of a number of reasons, most or all of which were without relevancy to the hinged folding plates or devices above mentioned. One of those reasons consisted in the fact that the paper bags made on it have their collapsed bottoms turned over on the unseamed side of the bag, instead of on the side having the pasted longitudinal seam, and were for that reason less acceptable, commercially, than they would be with their collapsed bottoms turned over on the seamed side. Another reason consisted in the possibility that a certain part of the machine, which operated upon the paper after the hinged folding plates had done their work, would be held to infringe a certain patent belonging to strangers."

Assuming the seam in the paper tube to have been securely pasted, that division of the machine shown in the patent in suit, to wit, "the devices for making the bag from the tube" having "tucked-in sides," would have operated, if at all (so far as I can make out), as well with the seam in the tube on the upper as on the under side. In the machine afterwards made by Lorenz and Honiss, as shown in letters patent No. 361,951, the folding plates are made to assist in forming the internal triangular fold in the bag bottom from a tube which is seamed, apparently, on the upper side. The affidavit of Honiss tends to create the impression that he and Lorenz were unable to make a practically operative machine by following lines indicated in the patent in suit. Honiss says further:

"During the time Mr. Lorenz and myself were engaged in inventing, designing, and constructing paper-bag machines to manufacture paper bags substantially like the specimen attached hereto, we produced a number of plans of different apparatuses for performing the particular function of the hinged folding plates, f, of said letters patent No. 242,661."

Being commissioned to use the machine of the patent in suit, or any part of such machine, for whatever could be accomplished with it, why did they rack their brains to invent some other device to perform the function ascribed to the folding plates, f, if said patented machine disclosed a mechanism in connection with which the folding plates could be made to do the work?

Finally, and in 1886, Honiss and Lorenz succeeded, as they say, in making a satisfactory bag machine; being that shown in letters patent No. 361,951. This machine contains folding plates like the hinged folding plates, f, but they do not enter the tuck in the manner shown in the patent in suit. The folding plates in patent No. 361,951 are attached to long, vertically rocking arms, so that they enter the tuck with their points inclined upwards; thus more certainly, in view of the position of the bag blank in that patent, passing over the lower half of the tuck, and into the tuck. As I read the specification in the patent No. 361,951, the paper tube proceeds, and, to a certain extent, is molded, over a former, whereby neither the inner nor the outer folds of the tucks are creased or flattened to an edge. Thus formed, the bag blank is carried under the lifted presser plate, 98, and the

folding plates pass into the tuck. Then the presser plate, 98, comes down on the bag blank, the sweeper shafts, 206 and 207, and the plate, 214, all swinging from above, enter the forward opening of the bag blank,—said opening having been enlarged so that such entrance is facilitated by the cutting away of a strip along the forward edge of the upper half of the bag blank,—and while the upper members of the folding plates part from the lower, and revolve through the half circle forming the inner triangular fold of the bag bottom, the lower forward edge of the bag blank is held and controlled in the formation of the box, 8, by the lower extremities of said sweeper shafts, 206 and 207, and said plate, 214. In the patent in suit the inner folds of the tucks are creased or flattened to an edge, and when the presser plate comes down across the bag blank the two divisions of the tuck are expected to spring apart so that the folding plates may pass into the tuck, and the rod, D, into the forward end of the bag blank. Honiss swears that the method of moving the folding plates in their approach to the tuck is better in the earlier than in the later patent. This depends on the allied mechanism. It might, perhaps, be true, as between the patents, if means be provided in the first machine for holding the lower half of the bag blank securely, and parting it from the upper half so that the folding plates, f, can certainly enter the tucks with the horizontal movement given them in the patent in suit. In the machine used by the defendant the folding plates do enter in a horizontal plane, but both the under and upper sides of the bag blank are securely held by suction tables while the plates so enter the tuck.

As the record stands, I am not sufficiently assured that the folding plates, f, of the ninth claim, with the associated mechanism as described in the patent, were to any degree practically operative for the purpose of making paper bags. I overrule the motion for the injunction pendente lite. Further than this, I do not mean to conclude the parties by anything in this opinion.

WESTERN MINERAL WOOL & INSULATING FIBRE CO. v. GLOBE
MINERAL WOOL CO.

(Circuit Court, D. West Virginia. June 25, 1896.)

PATENTS—INVENTION—ANTICIPATION—PROCESS FOR MAKING MINERAL WOOL.

The Rockwell patents, Nos. 447,360 and 452,733, for process of manufacturing mineral wool by remelting hardened slag or scoria from smelting furnaces, with lime and silica, or silica and lime-bearing stone, and blowing the same into mineral wool, show useful and patentable invention, and were not anticipated by the Brodmer patent, No. 70,510, or the Player & McAllister patent, No. 103,650.

This was a suit in equity by the Western Mineral Wool & Insulating Fibre Company against the Globe Mineral Wool Company for alleged infringement of letters patent Nos. 447,360 and 452,733, issued to Charles H. Rockwell on March 3, 1891, and May 19, 1891, respectively, for process of manufacturing mineral wool.