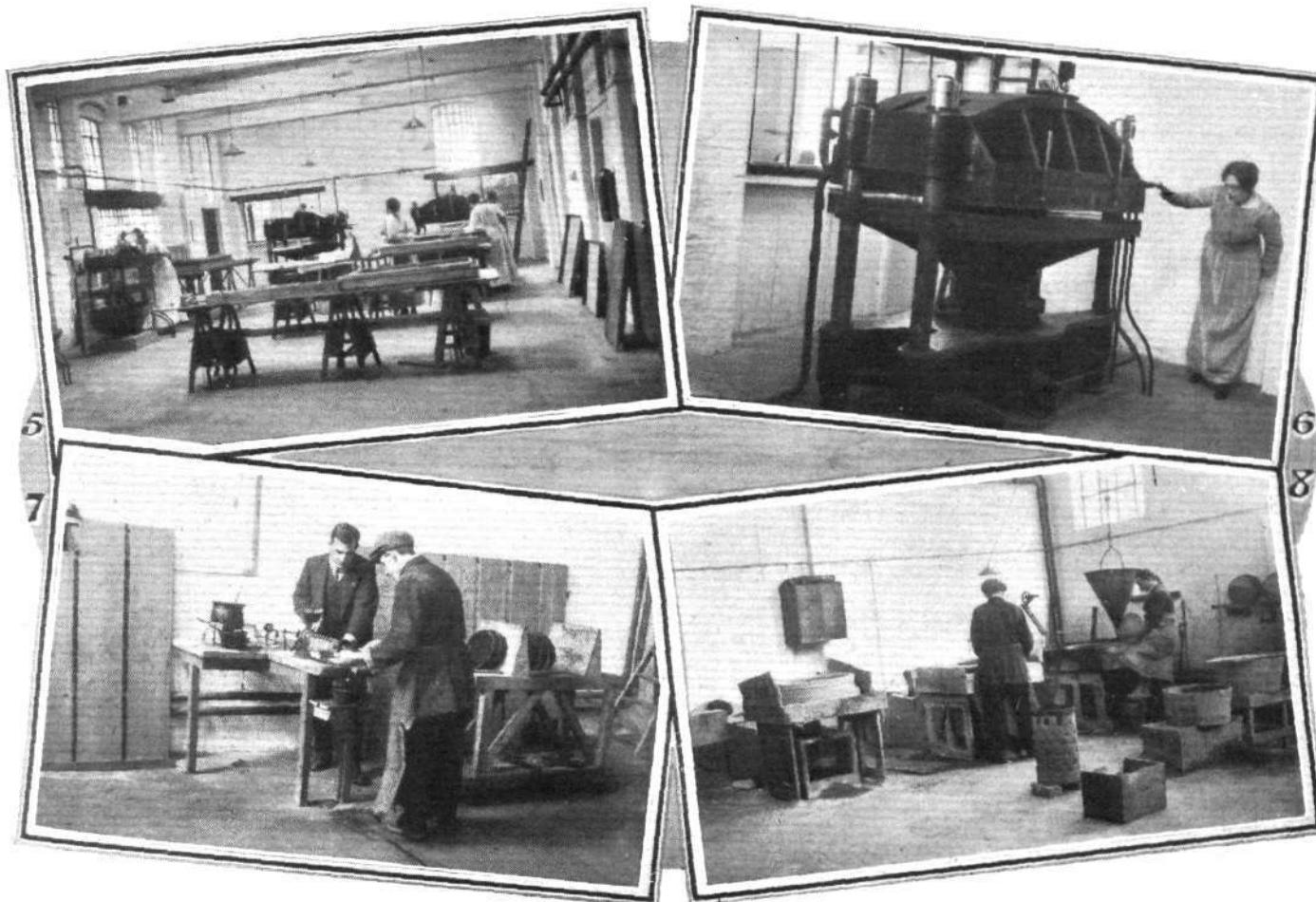


hand until the second adhesive coating is dry, being handled only with dusters.

When dry, they are placed in the coating machine to receive their covering of adhesive mixture. This machine is of great length, and the plates travel along under a dust-proof casing, and in the summer through ice chambers, so that when emerging at the far end, the coating mixture is sufficiently set to allow the plates to be racked up in cupboards, through which dry, warm, filtered air is circulating, and so finally dried. They are now ready for the enamellers, a process of which I am not allowed to say much, excepting that it consists of coating the prepared glasses with a transparent enamel, which is in its turn dried. From here we follow our screen that is

It is fascinating to watch these presses coming slowly down with their gigantic force, knowing that that which they are about to press is but glass. Let but a speck of grit be on the plate, a tiny morsel of xylonite be stuck to the glass, or even a pimple of infinitesimal size have escaped notice in the glass, and our windscreen will be cracked and powdered into dust at this spot, and all the material and time wasted. The screen is now examined for any flaw, and should one appear the whole thing becomes scrap, for it must not be supposed that a faulty screen of Triplex can be cut down to smaller sizes with impunity. Once the three or more pieces are cemented together, cutting is extremely difficult, and can hardly be considered a commercial success. From the press room the article goes to the



THE MANUFACTURE OF TRIPLEX SAFETY GLASS.—5. One end of the press room. 6. One of the hydraulic presses descending. 7. Sealing the edges. 8. The bevellers at work.

to be to the cutter, who will cut off the few inches from the edges and round the corners.

The next operation is to remove the coating of enamel for a small distance from the edge, all round, leaving only just that amount which shall coincide with the exact size of the sheet of xylonite to be used, which in itself will not come quite to the edge, owing to the necessity of leaving room for the sealing matter.

The sheet of xylonite having been selected and trimmed to exact size, the whole is taken to the press room, where the xylonite is treated and accurately placed between the two glasses. It is now to be pressed into optical contact. This is accomplished by hydraulic pressure and heat, the presses exerting a pressure of from 100 lbs. to 200 lbs. per square inch, maintaining this for a definite period.

sealer, who deftly fills in the margin not occupied by the xylonite with a black composition. The Triplex is now hermetically sealed against air and weather, which is necessary to keep the adhesives immune against time. To the beveller, then, who will skilfully bevel the edges and finish off the corners, and our screen is ready.

It is true, therefore, that Triplex is just two bits of glass stuck together, with something in between, but that sticking together entails more skill and careful handling, and opens so many more avenues of failure in individual work, than the average purchaser knows of, that it is quite feasible he wonders why it is not cheaper.

It is to be hoped these few words will now enlighten him as to what it is he is really buying, which, as Mr. Reginald Delpuch, the managing director of the Triplex Company, says, "is not only a windscreen, or a pair of goggles, but an insurance policy."

The Benoist Boat in Great Britain.

AFTER the recent successes of the Benoist flying boats in America it is not surprising to hear that this firm has started to look round for a better market in Europe than that existing across the "pond." It is all the more credit to Mr. Benoist that he has persevered and succeeded, in spite of scanty encouragement from his own country, until his products are among the best of their kind. While on a business trip to this country recently Mr. Benoist made arrangements with Messrs. R. F. Wells and Co., of Chelsea, who

will be sole agents for the Benoist machines and who have acquired sole building rights. As this firm have been doing quite a lot of aeroplane construction work they should be in a position to tackle a job like the building of a big Benoist twin-engine flying boat with confidence, and one hopes that these famous machines may soon become more familiar to us by practical demonstrations than they already are through illustrations and descriptions. With regard to the latter, by the way, we hope to be able to publish some interesting details shortly.