Dec. 27, 1932. J. GASKELL 1,892,488

MANUFACTURE OF WIRE NET GLASS AND APPARATUS THEREFOR

Filed June 21, 1932

Fig. 1.

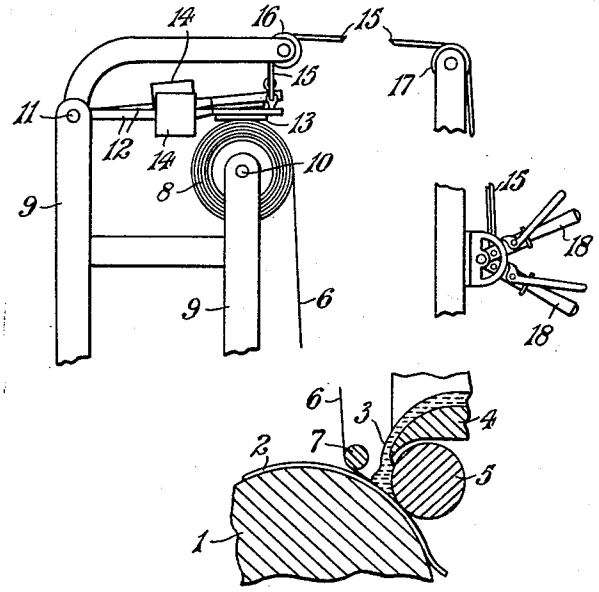
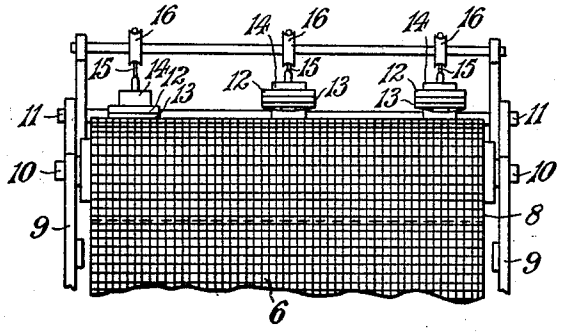


Fig. 2.



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Patented Dec. 27, 1932 1,892,488

UNITED STATES PATENT OFFICE

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MANUFACTURE OF WIRE NET GLASS AND APPARATUS THEREFOR

Application filed June 21, 1932, Serial No. 618,461, and in Great Britain July 3, 1931.

This invention relates to a process and apparatus for making wire net glass and has for its object an improved process and apparatus, whereby the wire net is maintained central in reference to the width of the glass.

The invention is applicable to the manufacture of wire glass in which wire net is drawn under tension into the glass or between the glass strips. It is found that the wire net has a tendency to move laterally relatively to the glass and so to become decentralized.

According to the invention, the position of the net is adjusted laterally by varying the position laterally of the net at which the retarding force causing the tension is applied.

The tension is preferably applied by a brake tending to retard the feeding motion of the wire net and in this case the brake is adapted to operate either at or away from the centre of the wire net.

The invention will be described in its application to that process of making wire glass in which a strip of glass is rolled and molten glass is allowed to flow on to the formed strip, and is rolled thereon, the wire net being introduced between the first rolled strip, and the molten glass. It is, however, applicable to other processes of making wire glass.

In the accompanying drawing:—

Figure 1 is a part side elevation of the net feeding apparatus, showing part of the glass rolling apparatus in section, and

Figure 2 is a part elevation of part of the net feeding apparatus.

Referring to the drawing, 1 is the main forming roller, on which has been formed the lower glass strip 2. Molten glass 3 issues from a spout 4 into the pass between the roller 1 and the roller 5 which form the upper glass strip. The wire net 6 is guided into the pass by the guide roller 7. The roll 8 of wire net is supported on a framework 9, being free to turn on its shaft 10. A rod 11 held in the framework 9 carries three arms 12 terminating in brake-blocks 13 which rest on the roll 8. Weights 14 give the requisite pressure on the roll. The arms 12 are connected by cords 15, passing over pulleys 16 and 17, with levers 18. By means of the levers 18 any of the three arms can be raised from the roll 8 or allowed to rest on it.

The three brake-blocks 13 rest on the roll 8, one centrally and one near each end. Normally, the central brake-block only rests on the roll and gives the retarding force against which the wire net is drawn between the forming rollers 1 and 5. If the wire net be found to move away from its central position between the forming rolls, say, to the left, then the right hand brake-block 13 is allowed to rest on the roll 8 and the central brake-block is raised. The unsymmetrical tension so produced in the wire net is found to bring the wire net back towards its central position. Alternatively, to produce a less unsymmetrical tension, the right hand and central brake-blocks may both be allowed to rest on the roll.

The above-described method of adjusting the position of the net laterally of the glass strips may be employed with other devices for exercising a retarding force on the strip. Thus, instead of a brake applied to the roll of wire net itself, the wire net may pass over an idle roller, and brakes may be applied to the net at its line of contact with the idle roller. Or the wire net may pass between pairs of rollers to which brakes may be applied. Alternatively, the symmetrical retarding force applied in any convenient way may be changed into an unsymmetrical force by deflecting either one or the other side of the wire net from its normal course by a roller or the like.

Having described my invention, I declare that what I claim and desire to secure by Letters Patent is:—

1. In the manufacture of wire glass strip by drawing wire net under tension by the glass forming rolls, the method of adjusting the position of the net laterally of the strip by varying the position laterally of the net at which the retarding force causing the tension is applied.

2. Apparatus for making wire glass comprising a glass rolling apparatus and means for feeding wire net to the said rolling apparatus, characterized by a brake tending to retard the feed of the wire net and adapted

to operate either symmetrically or unsymmetrically with reference to the width of the wire net.

3. Apparatus for making wire glass comprising a glass rolling apparatus, means for rotatably supporting a roll of wire net from which the wire net is drawn under tension by the glass forming rolls, three brakes adapted to act on the roll of wire net, one centrally and one near each end thereof, and means whereby each of the three brakes may be put into operative or into non-operative position.

In witness whereof I have affixed my signature hereto.

JOSEPH GASKELL.