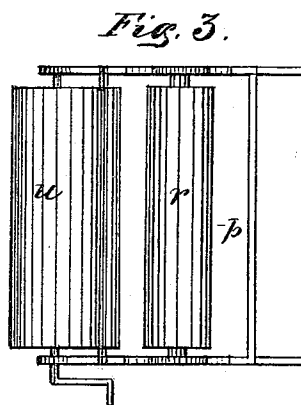
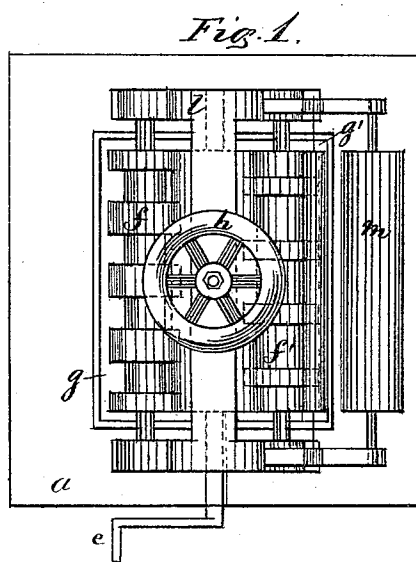
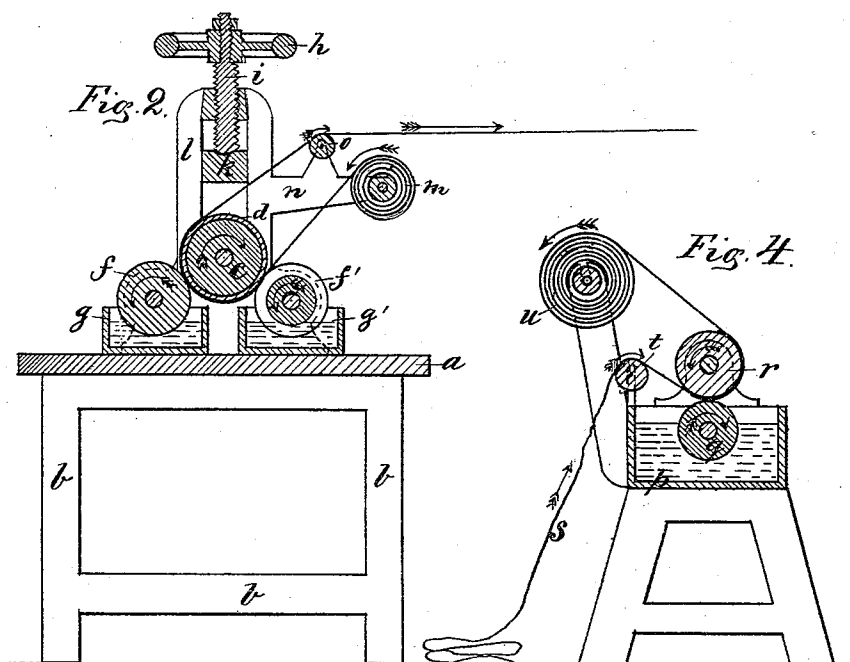


C. E. WHEELER.
Painting Striped Awnings.

No. 138,773.

Patented May 13, 1873.



Witnesses:
John H. Heard.
Aban Andren.

Inventor:
Charles E. Wheeler.

UNITED STATES PATENT OFFICE.

CHARLES E. WHEELER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PAINTING STRIPED AWNINGS.

Specification forming part of Letters Patent No. **138,773**, dated May 13, 1873; application filed March 22, 1873.

To all whom it may concern:

Be it known that I, CHARLES E. WHEELER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in the Manufacture of Awning-Stripes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing which forms part of this specification.

My invention relates to improvements in the manufacture of awning-stripes, consisting in striping white cloth with oil-colors by means of one or more painting-rollers partially immersed in one or more boxes containing the color with which the cloth is to be striped, in combination with an elastic pressure-roller, between which and the paint-roller the cloth is drawn.

Before the cloth is striped I let it pass through a sizing-machine containing water, solution of soap, or alkalies, for the purpose of preventing the oil-paint from spreading out all over the cloth. After the cloth has been striped it is hung up to dry, and is then ready for the use of tents, awnings, &c.

The awning-stripe manufactured in this manner is very durable, and the oil-paint with which it is striped will not fade as quickly as the ordinary woven stripe now used. Another advantage of my oil-painted awning-stripe is that water will not pass through it, and it is, therefore, very useful for tents, awnings, &c.

I can make my awning-stripe with brighter colors than can be made with woven stripes, as the oil-paint is not so liable to fade in the sun as the dyed stripes now in general use.

On the drawing, Figure 1 is a ground plan of the coloring-machine. Fig. 2 is a cross-section of the same. Fig. 3 is a ground plan of the sizing apparatus; and Fig. 4 represents a cross-section of Fig. 3.

Similar letters refer to similar parts wherever they occur on the drawing.

a on the drawing, Figs. 1 and 2, is the table supported on a suitable frame-work, *b b*, as shown. *c* is a plain cylindrical roller covered on its circumference with an elastic an-

nular ring, *d*. The cylinder *c* is movable in bearings in each end, and provided in one end with a crank, *e*, or its equivalent, by which the said roller is set in a circular motion. *f f'* are the rollers that convey the oil-paint from the boxes *g g'* to the cloth as it passes between the roller *c* and the coloring-rollers *f f'*. The said rollers *f f'* are partially immersed in the oil-paint in the boxes *g g'*, as shown in Fig. 2, and are made to revolve loose in suitable bearings. The friction-roller *c d* can be pressed more or less in contact with the paint-rollers *f f'* by means of the wheel *h*, screw *i*, and beam *k*. The roller *c d* is for this purpose supported in movable bearings that may slide up or down in a slot in each of the standards *l l'*. The rollers *f f'* may be made of any desirable shape, according to the number and width of the stripes that are to be painted on the cloth. *m* is the roller on which the cloth is wound in the sizing-machine, which will hereinafter be described. The roller *m* is made to run in bearings *n n'* attached to the standards *l l'* or any other stationary part of the machine, as may be practical. Any suitable arrangement, such as a weight, spring, &c., may be used to increase the tension on the roller *m*, so that the cloth may be delivered evenly to the rollers *c f f'*. *o* is a small guide-roller for the purpose of properly guiding the painted cloth from the machine to the drying-rack.

The sizing apparatus is fully shown in Figs. 3 and 4, and is constructed as follows: *p* is a suitable trough containing water or a weak solution of soap or alkalies. The roller *q* is partially immersed in the liquid and made to revolve loosely in bearings in the ends of the trough *p*. Another roller, *r*, is also made to revolve loosely in bearings attached to the trough *p*, but the latter roller is not at all immersed in the liquid. The cloth *s* passes over a guide-roller, *t*, and between the rollers *q r*, where it is sized sufficiently to prevent the oil-paint from spreading. The cloth is at last wound upon the roller *u*. The roller *u* with the damp cloth wound upon it is afterward placed in the position marked *m* on Fig. 2, and the cloth is now ready to pass between the painting-rollers *f f'* and elastic rollers *c d*, as heretofore described.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

1. In combination with the elastic pressure-roller *c d*, screw *h i*, and bar *k*, or their equivalents, of one or more pattern-rollers, *f f'*, partially immersed in the oil-paint contained in the boxes *g g*, for the purpose of striping awnings, &c., with oil-paint, as herein shown and described.

2. In combination with the oil-striping apparatus herein described, the sizing-machine consisting of the trough *p*, immersed roller *q*, rollers *t, r*, and *u*, as and for the purpose set forth.

3. As a new article of manufacture, awning-stripes, painted by machine in oil-colors, in the manner herein shown and described.

4. The process of manufacturing oil-colored striped awning, as herein shown and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of March, 1873.

CHARLES E. WHEELER.

Witnesses:

ALBAN ANDRÉN,
JOHN R. HEARD.