

(No Model.)

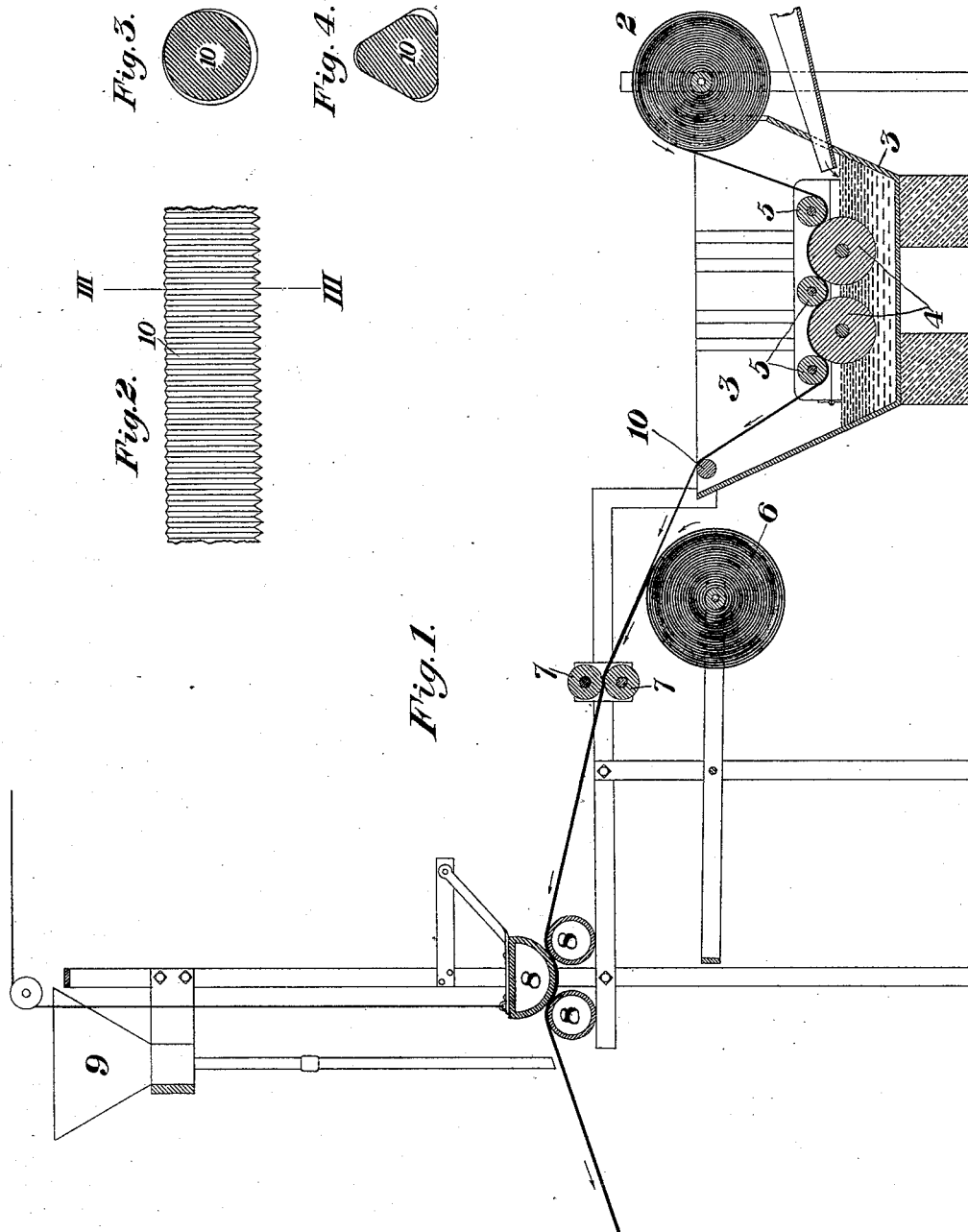
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SCRAPER BAR FOR COMPOSITE ROOFING MACHINES.

No. 422,609.

Patented Mar. 4, 1890.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN A. MCGRAW, GEORGE W. MCGRAW, JR., HENRY L. MCGRAW, AND
CHARLES EDWIN MCGRAW, OF ALLEGHENY, PENNSYLVANIA; HENRY
L. MCGRAW ADMINISTRATOR OF JOHN A. MCGRAW, DECEASED.

SCRAPER-BAR FOR COMPOSITE-ROOFING MACHINES.

SPECIFICATION forming part of Letters Patent No. 422,609, dated March 4, 1890.

Application filed June 25, 1889. Serial No. 315,466. (No model.)

To all whom it may concern:

Be it known that we, JOHN A. MCGRAW, GEORGE W. MCGRAW, JR., HENRY L. MCGRAW, and CHARLES EDWIN MCGRAW, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Scraper-Bars for Composite-Roofing Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of a machine provided with our improvement. Fig. 2 is a plan view of a part. Fig. 3 is a vertical cross-section on the line IIIIII of Fig. 2. Fig. 4 is a vertical cross-section of a modification.

Like symbols of reference indicate like parts in each.

In the drawings, 2 represents the roll from which the primary sheet or web of paper is drawn.

3 is a tank containing melted asphaltum.

4 are rollers partly immersed in the liquid, over and in contact with which rollers the paper passes.

5 are rollers which serve to hold the paper in contact therewith.

6 is the roll from which the second web of paper is drawn.

7 7 are compressing-rollers, between which the webs are drawn for the purpose of uniting them together, and 8 is a smoothing or compressing device for rubbing the sheet and smoothing out the creases thereof.

The paper is drawn through the machine in the usual and well-known manner, and at the delivery end of the machine its surface is preferably sanded by sand discharged from a suitable hopper 9.

The machine as thus described is substantially the same in construction as that shown and described in a patent, No. 366,857, granted to George W. McGraw on July 19, 1887, and is therefore not claimed herein specifically by us.

Our invention consists in a scraper-bar 10 of peculiar construction, arranged on the delivery side of the vat, for the purpose of removing surplus asphaltum liquid from the

paper sheet as it emerges from the latter. In practice we have found that for such purpose it is desirable to use a serrated or toothed scraper-bar, in contact with which the paper passes, since such serrations, although removing efficiently the surplus liquid, leave sufficient remaining to cause the paper webs to adhere; but we have also found that as the temperature of the liquid varies at different times a scraper-bar having serrations of constant size and relative positions will not at all times perform the work properly, since at one time it may remove more of the liquid than at others. To avoid this difficulty, we have devised our present invention, which consists in an adjustable scraper-bar having peripheral grooves or serrations of varying depth or number at different lines, so that by changing the line of the bar presented to the passing paper the effective number and size of serrations may be varied. This is illustrated in Fig. 2, in which the peripheral grooves are made tapering in depth, and the bar is set in its bearings in the sides of the vat, so that it may be turned and thereby adjusted, as just explained. The same result may be had by making the bar as shown in Fig. 4, having several distinct lines of serration, any one of which may be presented by turning the bar.

We claim—

1. The combination, with the vat for supplying an adhesive substance to the sheet, of an adjustable scraper-bar having serrations varying at different lines of the bar, substantially as and for the purposes described.

2. The combination, with the vat for supplying an adhesive substance to the sheet, of an adjustable scraper-bar having peripheral grooves tapering in depth, substantially as and for the purposes described.

In testimony whereof we have hereunto set our hands this 3d day of May, A. D. 1889.

JOHN A. MCGRAW.
GEORGE W. MCGRAW, JR.
HENRY L. MCGRAW.
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Witnesses:

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