(No Model.)

J. W. VAUGHN.

ROLL FOR LEATHER WORKING MACHINES.

No. 344,069. Patented June 22, 1886.

Fig. 1.

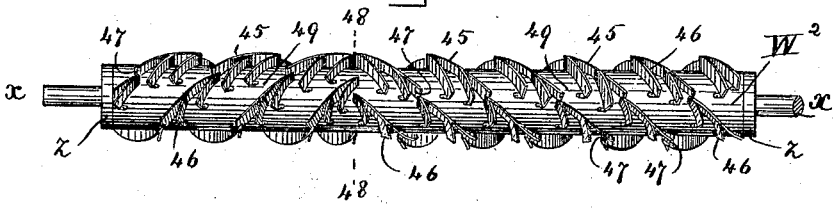
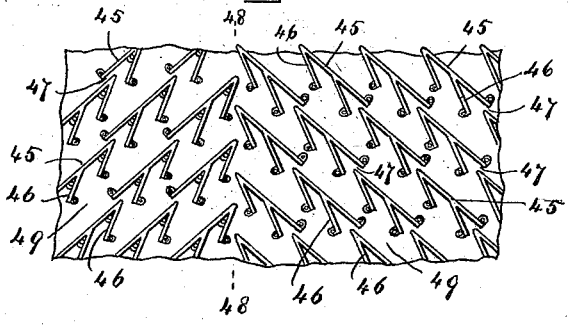


Fig. 2.



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ROLL FOR LEATHER-WORKING MACHINES.

SPECIFICATION forming part of Letters Patent No. 344,069, dated June 22, 1886.

Application filed April 5, 1886. Serial No. 197,889. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. VAUGHN, of Peabody, in the county of Essex, State of Massachusetts, have invented a certain new and useful Improvement in Rollers, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved roller, and Fig. 2 a diagram showing the arrangement of the flanges.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of rollers which are employed in machines for putting-out, striking-out, fleshing, scouring, and unhairing hides and skins in the manufacture of leather; and it consists in the novel construction and arrangement of parts hereinafter fully set forth and claimed, the object being to produce a more effective and desirable article of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, W^2 represents the body of the roller, and *x x* the journals, the body being preferably composed of wood, and provided with a band or hoop, *z*, at either end. The roller is provided peripherally with a series of main flanges, 45, arranged in rows, which start from a circumferential line at 48, and pass spirally around the body of the roller outwardly to either end, as shown in Fig. 1. The main flanges 45 are respectively provided at uniform distances apart on their sides or faces with short auxiliary flanges 46, which are preferably slightly curved and stand at an angle of about forty-five degrees to the bodies of the main flanges. The auxiliary flanges may be formed integral with the main flanges, or made separately, as desired. The ends of the flanges 45 overlap each other, spaces 47 being left between the overlapped ends to form channels, through which the water expressed from the hide or skin may flow, thereby enabling the water to find its way to the ground more readily than it would if said flanges 45 were united to form a continuous flange, this feature being of especial advantage in treating very wet hides and skins. The rows of flanges being also composed of short flanges or sections, are more convenient and less expensive to construct. The short or auxiliary flanges 46 are of the same height as the main flanges 45, but do not extend entirely across the spaces between the rows which are formed by the flanges 45, thus leaving a space, 49, between the rear ends of the short flanges and the front faces of the main flanges, which serves as a channel to assist in carrying off the water expressed from the hide or skin, and causing it to drop to the ground. The edges of the flanges may be angular or rounded in any degree, or in accordance with the work they are required to perform, and when rounded may be safely applied to the grain side of the hide or skin. The long or main flanges 45 remove the light fleshings from the hide or skin and stretch it downward, and also diagonally outward, while at the same time the short or auxiliary flanges 46, which stand nearer to a right angle with the longitudinal axial line of the roller than the flanges 45, stretch it laterally or more nearly in a line parallel with said axial line. When constructed with angular edges, the flanges readily remove the lighter fleshy parts of the hide or skin; but they may be so constructed as to render the machine adapted to green-shave or remove the heavy or thick fleshings, if desired. As the the flanges 45 of the roller all start from a common circumferential line, 48, the hide or skin at the part corresponding therewith would not be properly "put out" or treated if the flanges 45 only were used, or if the short flanges 46 on the line 48 were arranged in regular order, and therefore the short flanges at that point are irregularly arranged, as shown. The shoulder portions of a hide or skin are usually somewhat "baggy" or full, and in order to perform the work properly it should be put out or stretched in either direction from the shoulders. The line 48, or starting-point of the flanges 45, is therefore placed a short distance to the left of the

center of the roller, in order to bring it over the shoulders of the hide or skin and enable that portion to be properly put out or treated. The starting-point of the flanges or line 48 may, however, be located at the center of the roller to the right of the center, if desired. By overlapping the ends of the flanges 45 said flanges are caused to stand at a different angle with respect to the longitudinal axial line of the roller than they would stand at if arranged end to end or in a continuous line, thereby producing somewhat better results than would be attained by arranging them as last described, and also forming channels 47 for carrying off the water. I do not, however, confine myself to overlapping the ends of the flanges 45, as they may be arranged end to end or in a continuous line and perform their functions satisfactorily; neither do I confine myself to leaving the spaces 47 between the ends of said flanges when they are overlapped, as they may be overlapped and the ends left in contact, or approximately so, and thereby greatly increase their efficiency whether the spaces 47 are left between the overlapped ends or not; neither do I confine myself to the use of any special number of auxiliary flanges on the main flanges, as one or more may be employed.

Having thus explained my invention, what I claim is—

1. In a roller of the character described, the body W^2, provided peripherally with a series of main flanges, 45, having one or more auxiliary flanges, 46, said main flanges being arranged in rows which start at or near the center of said body and extend spirally around the same outwardly to either end thereof, substantially as described.

2. A roller having a series of peripherally-disposed scraping or cutting flanges arranged in rows which pass spirally around or partially around the body thereof, certain of said rows starting at a circumferential line or point which is located between a line drawn transversely through the center of said roll and one of its ends, substantially as shown and described.

3. In a roller of the character described, the main flanges 45, having one or more auxiliary flanges, 46, said main flanges being arranged in rows which start at or near the center of the roller, and pass spirally around the body thereof, and have their ends overlapped, substantially as described.

4. In a roller of the character described, the main flanges 45, having one or more auxiliary flanges, 46, said main flanges being arranged in rows which start at or near the center of the roller and pass spirally around the body thereof, said main flanges having their ends overlapped and separated to form the channels 47, substantially as set forth.

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