

No. 850,131.

PATENTED APR. 16, 1907.

R. BUCHHOLD.  
RACK FOR DRYING LEATHER.  
APPLICATION FILED SEPT. 21, 1904.

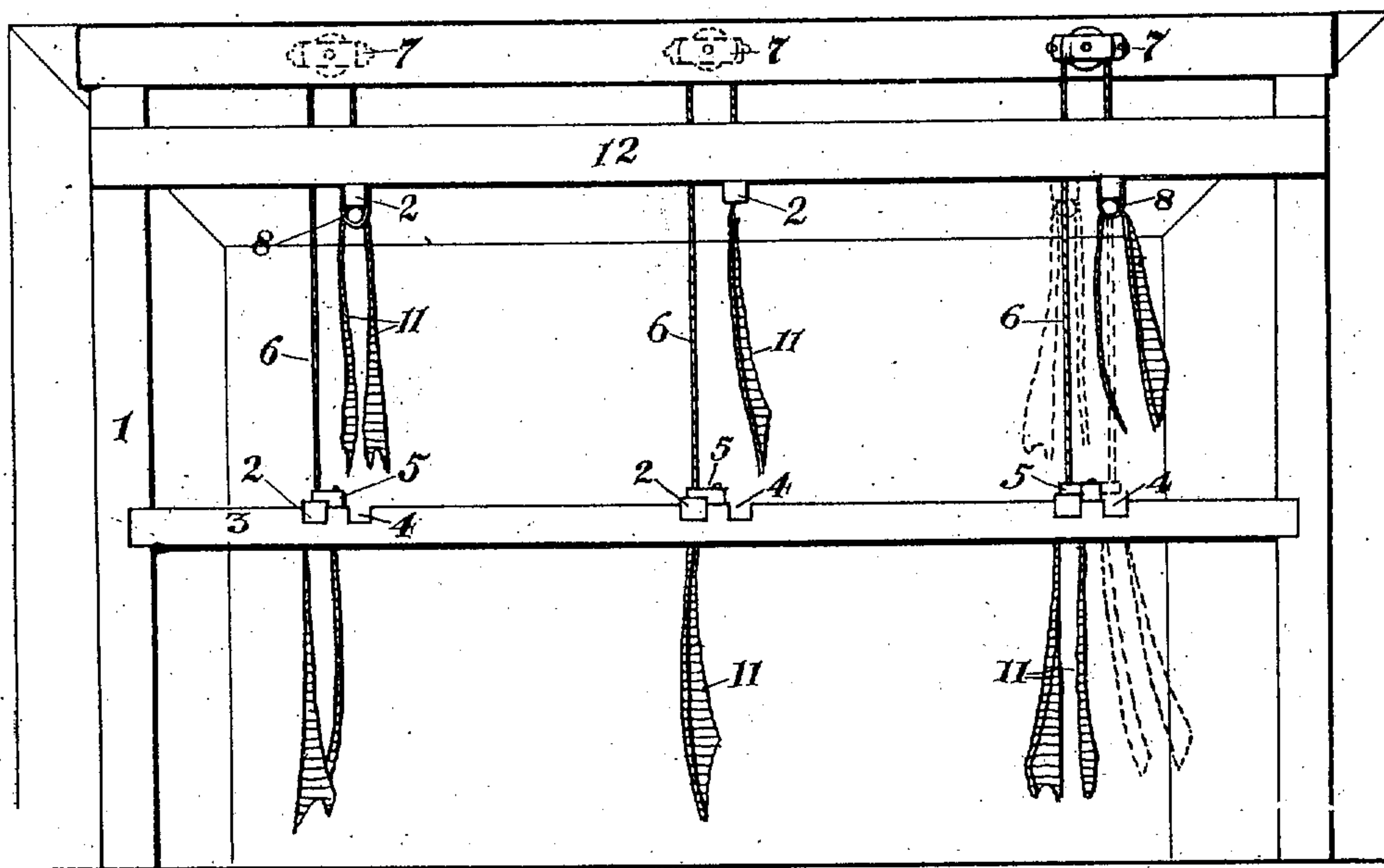
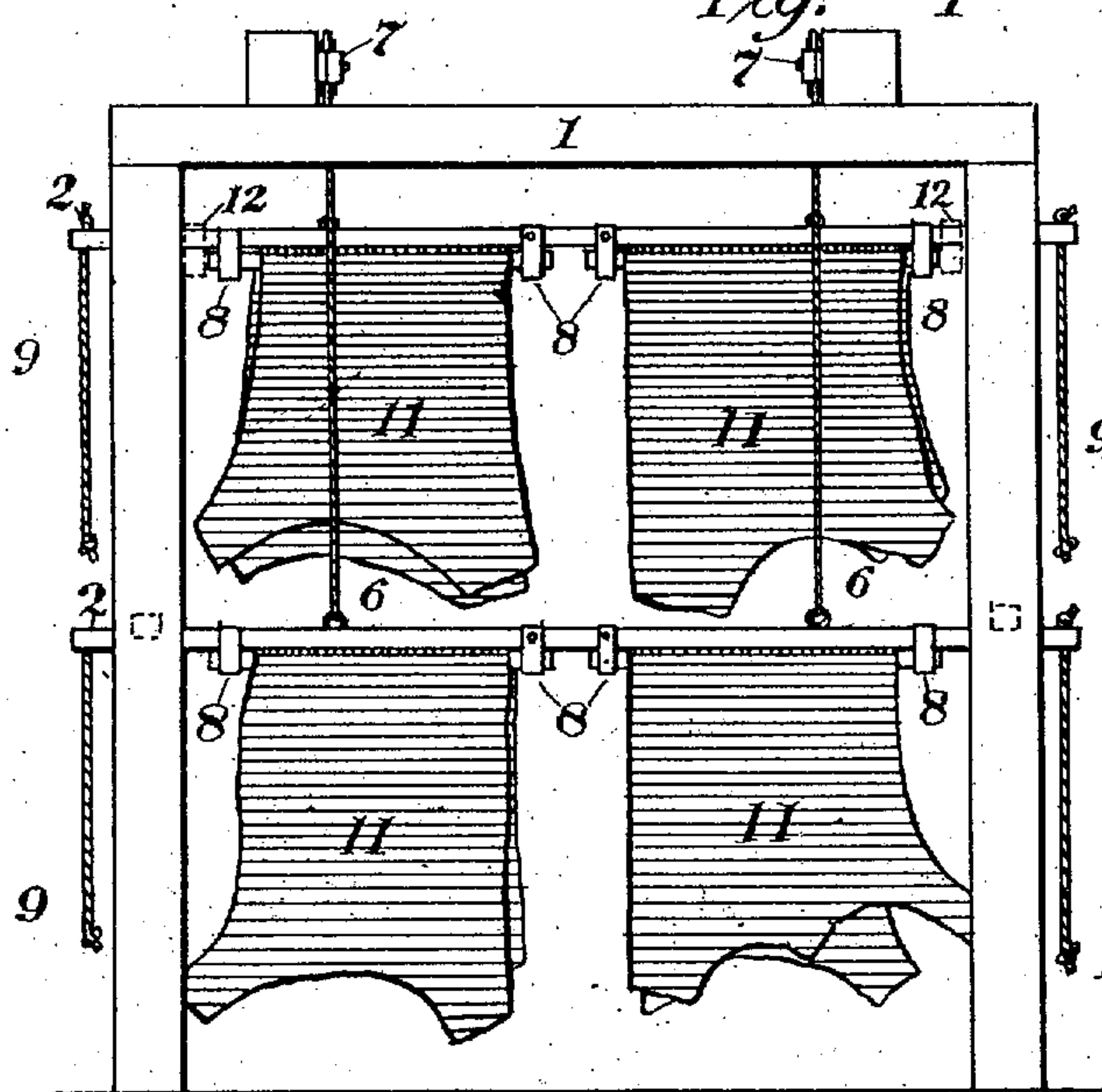


Fig. 1



Witnesses. Fig. 2

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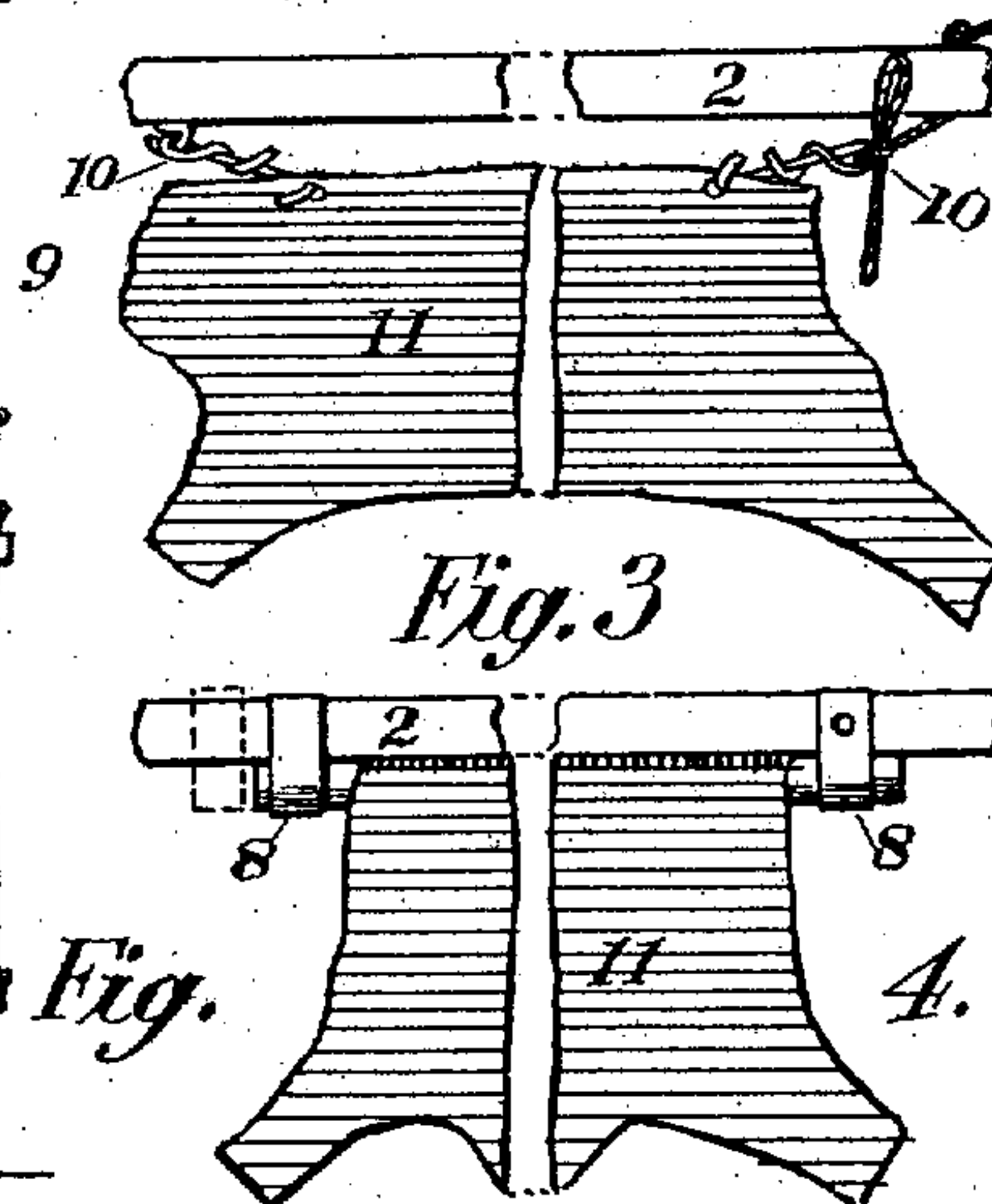


Fig. 3

Fig. 4

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# UNITED STATES PATENT OFFICE.

RUDOLPH BUCHHOLD, OF LOUISVILLE, KENTUCKY.

## RACK FOR DRYING LEATHER.

No. 850,131.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed September 21, 1904. Serial No. 225,349.

*To all whom it may concern:*

Be it known that I, RUDOLPH BUCHHOLD, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Rack for Drying Leather, of which the following is a specification.

My invention relates to means for suspending and handling leather during the process of drying; and the objects of my improvement are ease and facility of handling the leather, to dry the leather quickly and yet avoid rendering it brittle or liable to crack, to produce an improved quality of leather, to impart the most desirable color to the leather, to avoid imparting finger-prints or otherwise soiling the leather, saving of space in the drying-room, and simplicity and inexpensiveness of construction. These objects I attain by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation; Fig. 2, an end elevation, and Figs. 3 and 4 are details of the means for suspending the hides.

The frame 1 may be constructed separate from the building, or the upright posts may be fastened to the floor and to the ceiling. Longitudinal bars 3 and 12 are placed on the sides of the rack, the bar 3 being placed just high enough from the floor to prevent the hides from touching the floor when the bars from which the hides are suspended rest upon it, and bar 12 being placed at such a distance below the ceiling that the upper series of hides will clear the lower series and the bars upon which they are suspended. Transverse bars 2, from which the hides 11 are suspended, extend across the longitudinal bars 3 and 12. The bars 2 extend a short distance beyond bars 3 and 12 and at their ends are provided with pendent ropes 9 for manipulating them. They are suspended from ropes 6, which pass over pulleys 7, secured to the joists of the ceiling or to the upper longitudinal timbers, as the case may be. The bars 2 are arranged in pairs, the two bars of each pair being just far enough apart so that the hides suspended from them will not interfere when passing each other. A larger space is provided between the pairs of bars for the free circulation of air. The bars of each pair are suspended from opposite ends of ropes 6, one of which is attached intermediate between each end and the middle of the bars, and the ropes are of such length

that when the one bar of the pairs is down in contact with bar 3 the other bar rests against the under surface of bar 12. The pulleys 7 are preferably of the ordinary hot-house pulley form, of such diameter as to give the ropes 6 the proper spread. The hides 11 are suspended from bars 2 either by hooks 10 or folded over sticks, which are held to bars 2 by means of clips 8. When the clips are used, one of them is stationary on the bar and the other arranged to slide, so that the stick may be released at one end and then withdrawn from the stationary clip, as shown in Fig. 4. The manner of suspending by means of hooks 10 is illustrated in Fig. 3. Notches 4 are provided in the upper edge of bar 3 for the reception of bars 2, and between the pairs of notches a button 5 is provided for holding bars 2 in place when necessary. With this device the hides may be suspended entire, as shown in Fig. 4, when they are to be used for belting, or in halves, as shown in Fig. 3 and Fig. 2. In Fig. 3 the half-hide is shown not folded, whereas in Fig. 2 it is shown folded and suspended by means of a stick.

It has been found that if hides are dried too rapidly at the beginning of the drying process the leather becomes brittle and is liable to crack and may become altogether worthless. When the requisite time to avoid this is allowed in the ordinary way, the process is expensive from requiring a great deal of time or a very large drying-room is required. In a heated room the upper air is hotter and drier than the lower, and this natural difference is peculiarly available in perfecting the process of leather-drying. By my process many more hides may be properly dried in a small drying-room than can be done in the ordinary way. I have found that if the hides are placed in cooler air and dried slowly at first they may afterward be finished more rapidly, and that by drying more rapidly at the latter part of the process a more desirable color is imparted, and the quality of the leather is not impaired, but greatly improved. This more-rapid drying also prevents the molding that is incident to keeping the leather in the overmoist air near the floor. This new process of drying I accomplish with my new rack in the following manner: The hides are suspended from the lower set of bars 2, which are resting upon the bars 3, and are allowed to remain in that position in the cooler and less rapidly drying



air near the floor. They are then lifted by a man at each end of bars 2 by means of ropes 9 to the upper portion of the drying-room near the ceiling into the more rapidly drying air, where they are quickly finished. When the bars 2 of one set are lifted, the corresponding set is brought down upon bars 3 and fastened by means of the buttons 5, which prevent the first-named bars, which are loaded with the hides, from descending. The lower bars 2 are then loaded with hides, which are allowed to go through the first process of drying. When the upper hides are sufficiently dried, the buttons 5 are released, the upper bars 2 are drawn down by means of ropes 9, and the dried hides are removed and replaced by wet hides. It will be understood that the wet hides below will add sufficient moisture to the air as it ascends to the partially-dried hides above to prevent their drying too rapidly and causing cracks. By means of this rack the hides are very rapidly handled by two men, one at each end of bars 2, and also very easily handled, because the difference in the weight between the finished hides above and the partially-dried hides below is not great, so that they nearly balance. It is obvious, also, that with my improved rack the hides need not be touched after they are once suspended till perfectly dried, thus avoiding finger-prints and other stains and soil.

Having thus described my invention, so that any one skilled in the art pertaining thereto may make and use it, what I claim as new, and desire to secure by Letters Patent, is—

1. In a rack for drying leather, the combination of hide-suspending bars arranged trans-

versely in pairs at such a distance apart that they may pass each other without interfering, a low pair of longitudinal bars upon which the ends of said hide-suspending bars may rest, a pair of longitudinal bars above said low pair of longitudinal bars under which said hide-suspending bars may rest, pulleys attached near the ceiling of the drying-room, ropes working over said pulleys having their ends attached to corresponding parts intermediate the middle and the ends of said hide-suspending bars so that as one hide-suspending bar is lowered the corresponding one is raised, and means for fastening said hide-suspending bars in position, substantially as specified.

2. In a rack for drying leather, the combination of stationary vertical bars, longitudinal horizontal bars connecting the upper ends of said vertical bars, longitudinal horizontal bars connecting said vertical bars for limiting the upward movement of transverse suspending-bars, horizontal longitudinal bars for limiting the downward movement of transverse suspending-bars, transverse hide-suspending bars disposed in pairs arranged to operate between said longitudinal horizontal bars, pulleys attached to the first-named longitudinal horizontal bars, ropes working over said pulleys and having their ends secured to said hide-suspending bars in such a manner as to balance said hide-suspending bars, and catches on said lower longitudinal horizontal bars for securing said hide-suspending bars, substantially as specified.

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Witnesses:

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