

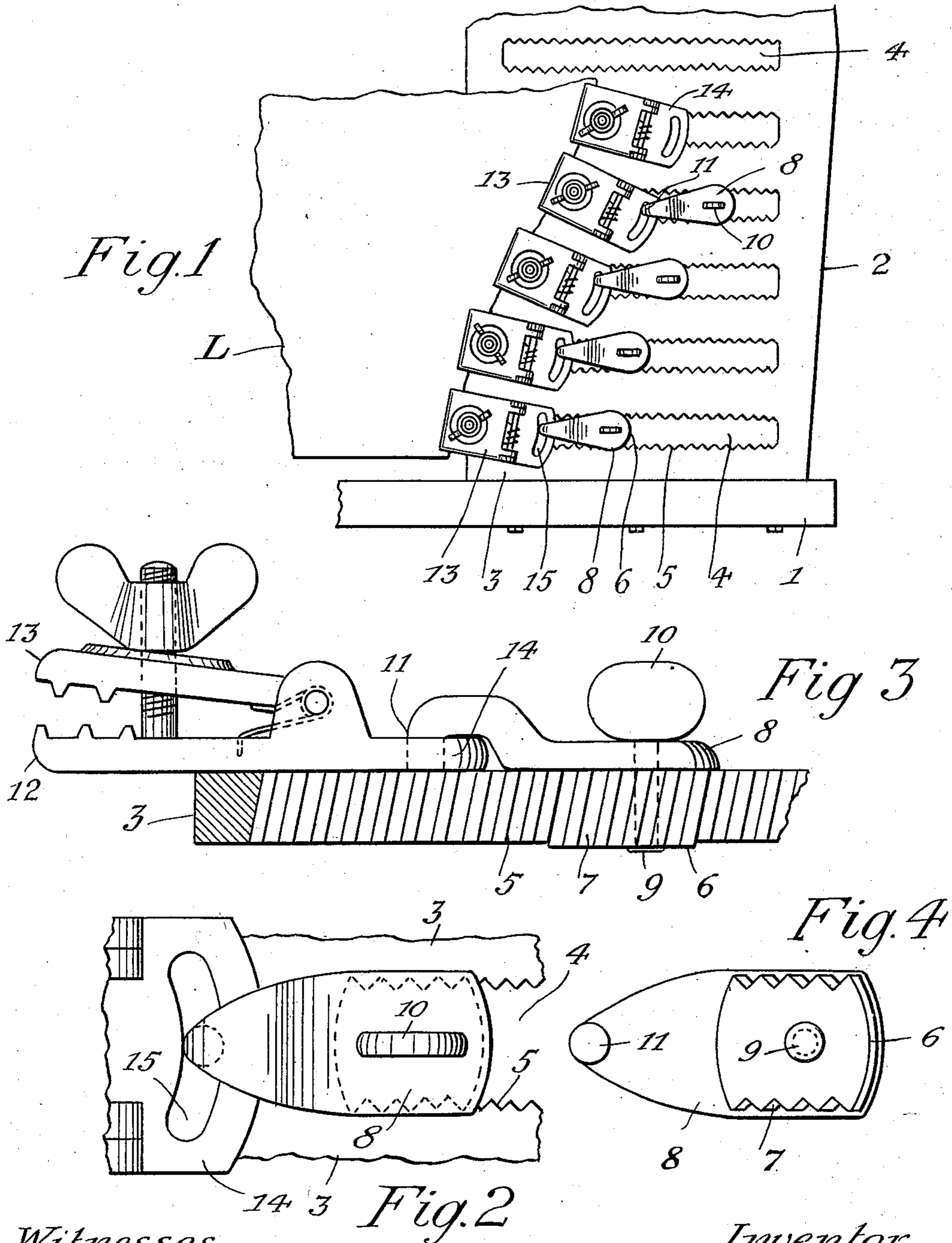
No. 692,615.

Patented Feb. 4, 1902.

J. CALDWELL.  
LEATHER STRETCHING DEVICE.

(Application filed Nov. 19, 1901.)

(No Model.)



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN CALDWELL, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO W. S. NOTT COMPANY, OF MINNEAPOLIS, MINNESOTA, A CORPORATION.

## LEATHER-STRETCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 692,615, dated February 4, 1902.

Application filed November 19, 1901. Serial No. 82,816. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN CALDWELL, a citizen of the United States, residing at Minneapolis, county of Hennepin, and State of Minnesota, have invented certain new and useful Improvements in Leather-Stretching Devices, of which the following is a specification.

My invention relates to the clamps or devices used in connection with leather-stretching machines for holding the ends of the leather during the operation of stretching it; and the object of the present invention is an improvement of the means for connecting such leather-holders to the heads or other appropriate parts of the stretching mechanism.

My improvements, stated in a general way, consist in providing the stretcher-head with a series of slots extending lengthwise of the stretching-frame, the walls of the slots having vertical or suitably-slanting notches, corrugations, or like irregularities of surface and independent leather-holder coupling devices consisting of plugs or small metal bodies having their side walls adapted to fit in the slots at selected points and engage the irregular surfaces of the slot-walls, and thereby become locked to retain the leather-holders in place, and means for detachably and preferably pivotally connecting leather-holders to the coupling devices. Such devices are illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a portion of a stretcher head and frame equipped with my improvements. Fig. 2 is a similar view, enlarged, of a portion of Fig. 1. Fig. 3 shows a portion of the stretcher-head in vertical section and a leather-holder and its coupling device in side elevation, and Fig. 4 is a detail of the coupling device viewed from beneath. In the drawings the reference-number 1 designates one of the sides of an ordinary rectangular stretcher-frame, and 2 its stationary head, secured thereto by bolts or in any suitable way. The portion of the apparatus containing the stationary head is selected for convenience of illustration; but my improvements are applicable as well to the slidable head of the apparatus.

On the surface of the head (which may be of wood) is secured a metal plate 3, extending from side to side of the head and having

a series of slots 4 a suitable distance apart and extending parallel with the frame sides 1—in other words, in line with the direction of movement of the sliding stretcher-head. The side walls of the slots 4 are provided with notches, corrugations, or like irregularities 5, extending in vertical or suitably-slanting direction.

The coupling device consists of a plug or short metal body 6 of proper size to enter a slot 4 and having on its side walls suitable notches or irregularities 7 for engaging the irregularities of surface of the slot-walls to hold the plug against movement along the slot when subjected to tension. On the upper surface of the plug is placed a plate or other suitable body of metal 8, and the two members are connected by a pivot 9, so that the plate may turn freely on the plug. For convenience in handling the device the plate 8 is provided with a handle 10, which is preferably formed on the upper end of the pivot 9. The forward end of the plate 8 is preferably provided with a hook 11 for making connection with the leather-holder. The holder selected for illustration is of the clamp form, comprising a base-plate 12 and an upper movable jaw 13, the base member having a tail-piece 14, provided with an opening 15, convexed toward the coupling device and adapting it to receive the hook of the coupling device and permit the holder to be adjusted laterally on its pivotal connection and to swing freely under tension.

In a practical application of the devices, as illustrated in Fig. 1, a series of the holders may be made to engage portions of the irregular end of a side or other division of leather L and the leather and the holders placed on the stretcher-head. The holders may then be successively connected to the head by inserting the plugs of the coupling devices at proper points in the slots 4 to cause the hooks 11 to engage in the tailpiece-openings 15. The pivotal connection of the plates 8 to the plugs 6 enables them to be turned laterally, when necessary, to proper position to engage the holders and thereafter permit free swinging movement of the holders with respect to the plugs 6.

The subject-matter of invention herein disclosed and not herein claimed relating to

means for adjustably pivoting the leather-holders to their coupling devices is reserved to be claimed in my pending applications, Serial No. 1,424, filed January 15, 1900, and  
5 Serial No. 10,128, filed March 26, 1900.

Having described my invention, what I claim is—

1. The combination with a stretcher-head having a slot extending in the direction of  
10 the machine's tension, the side walls of the slot having irregularities of surface, of an independent leather-holder coupling device provided with a body adapted to be inserted and retained in such slot to connect a leather-  
15 holder to the stretcher-head, substantially as set forth.

2. The combination with a stretcher-head having a slot extending in the direction of the machine's tension, the side walls of the  
20 slot having irregularities of surface, of an independent leather-holder coupling device

provided with a body adapted to be inserted and retained in such slot, and means for pivotally connecting a leather-holder to the coupling device, substantially as set forth. 25

3. The combination with a stretcher-head having a slot extending in the direction of the machine's tension, the side walls of the slot having irregularities of surface, of an independent leather-holder coupling device  
30 provided with a pivotally-connected body adapted to be inserted and retained in such slot, and means for connecting a leather-holder to such coupling device, substantially as set forth. 35

In testimony whereof I have hereunto set my hand this 15th day of November, 1901.

JOHN CALDWELL.

In presence of—

F. H. GEORGE,  
P. H. GUNCKEL.