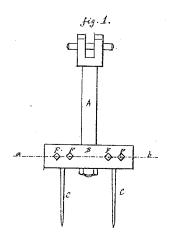
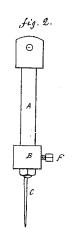
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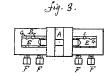
Panching Leather:

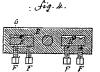
No. 111,957.

Patented Feb. 21. 1891.









Witnesses: Edward Prose-Eugene Yess

Inventor: John statheis

## United States Patent Office.

## JOHN MATHEIS, OF OTTAWA, ILLINOIS.

Letters Patent No. 111.957, dated February 21, 1871.

## IMPROVEMENT IN LEATHER-PUNCHING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN MATHEIS, of Ottawa, in the county of La Salle and State of Illinois, have invented a certain Improvement in Leather-Punching Machines, of which the following is a specification.

My invention relates to machines for punching leather straps for fly-nets, and for which I have already obtained two patents, one dated July 21, 1868, and one dated May 18, 1869, and consists in an alteration of the same machines, but especially the latter, whereby it becomes adapted to a new purpose, which is to pierce the holes necessary to sew together the several thicknesses of leather straps or belts which make a trace for a harness, as also for any other kind of work in which two or more straps of leather are united by one or more longitudinal seams.

The object of my invention is to pierce said holes much faster and more regular than can be done with an awl and by hand labor, as has been done heretofore, while, at the same time, the work can be intrusted to a less experienced workman or even to an apprentice.

Figures 1 and 2 are side elevations of that part of the machine which embodies my present improvement;

Figure 3 is a plan; and

Figure 4 is a vertical section through a b, fig. 1.
I make a hinged joint in the punching-bar D of the patent No. 90,281, in about the middle of its length, and removing the lower part I replace it by the punch-

ing or piercing-bar, shown in the drawing. This consists of a vertical bar, A, to the bottom of which is attached a cross-head, B, which holds the needles or awls C.C.

The cross-head B is made hollow in two or more divisions, each division containing a small notched metal block, E, which is pressed against the needle by means of the screws F F.

The notches G G G in the block E are for the purpose of allowing the needles C C to be set more or less apart, so as to accommodate straps of different widths.

The machine is used in the same manner as for punching holes, only the needles or awls merely pierce through the leather without taking off a burr. After the whole strap is thus pierced at regular intervals the workman inserts the thread with a common needle and finishes the seam in the ordinary manner.

I claim-

A punching-bar, composed of the vertical bar A, the cross-head B, the blocks E E with notices G G G, the screws F F, and the needles or awls C C, in connection with a machine for punching leather straps for ply-nets, substantially as and for the purpose described.

JOHN MATHEIS.

Witnesses:
EDWARD ROSE,
EUGENE HESS.