

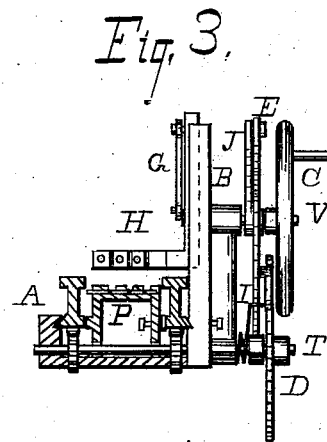
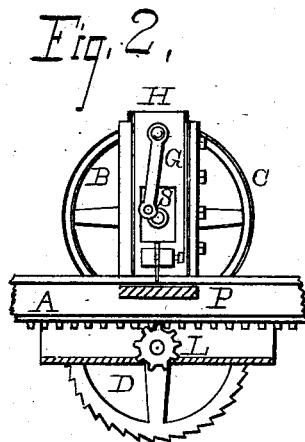
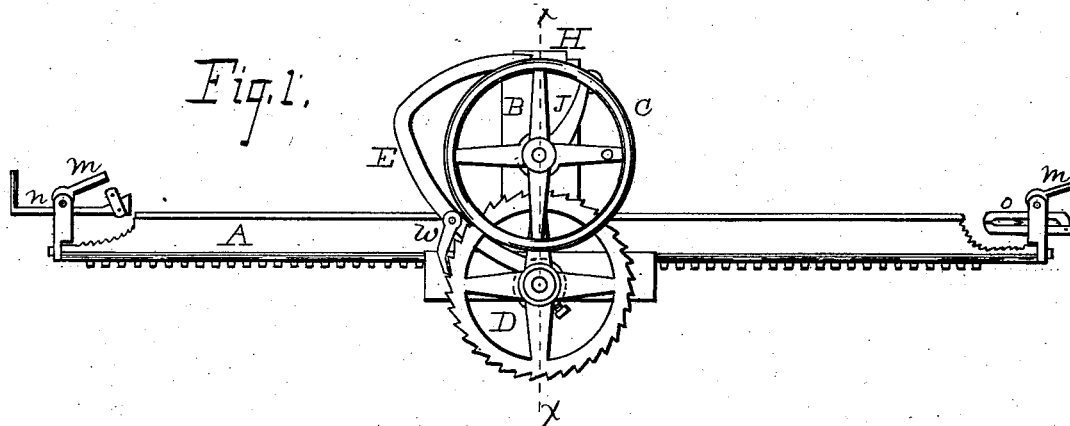
(No Model.)

2 Sheets—Sheet 1.

W. FOGLESONG.  
LEATHER PUNCHING MACHINE.

No. 260,381.

Patented July 4, 1882.



WITNESSES:

*Leopold Leibold*  
*John Trautmann*

INVENTOR.

*Washington Foglesong*  
BY *B. Pickering*

ATTORNEY.

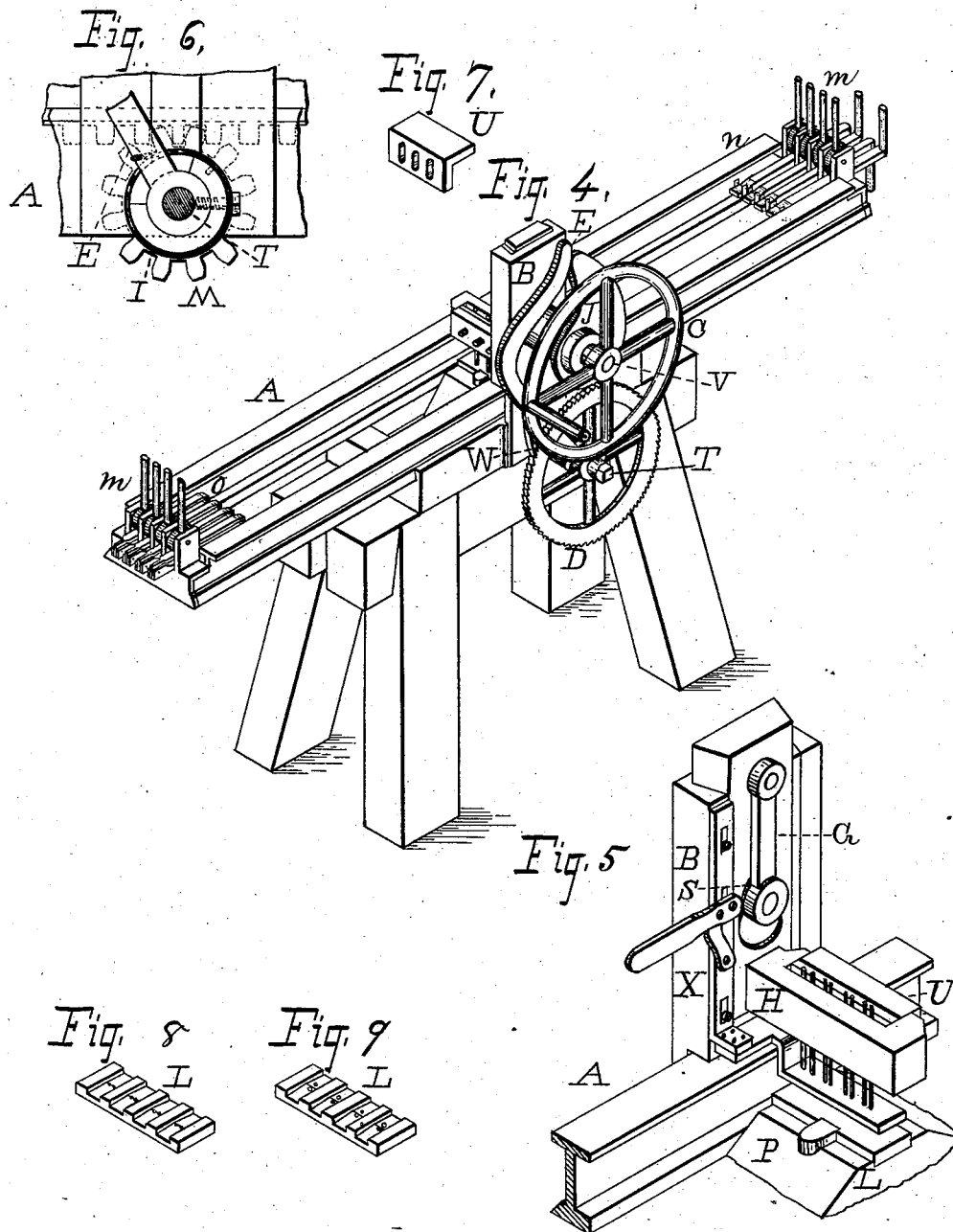
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# UNITED STATES PATENT OFFICE.

WASHINGTON FOGLESONG, OF DAYTON, OHIO.

## LEATHER-PUNCHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 260,381, dated July 4, 1882.

Application filed September 8, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, WASHINGTON FOGLESONG, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented a new and useful Leather-Punching Machine, of which the following is a specification.

My invention relates to a machine for punching holes in a series of leather straps used in the construction of fly-nets. I attain the object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the leather-punching machine. Fig. 2 is an opposite view from the center of the bed. Fig. 3 is an end view, the part in section being on the line *xx*. Fig. 4 is an oblique view of the leather-punching machine. Fig. 5 is an oblique view of the frame with a section of one side of the bed. Fig. 6 is an enlarged view of a section of the side of the bed, and the cog-wheel that engages the rack of the same. Fig. 7 is an angular clamping-piece. Figs. 8 and 9 are punching-plates, one with holes in series of two arranged longitudinally, and the other series transversely.

Similar letters designate like parts throughout the several views.

A represents a cast-iron bed of suitable length for the purpose, the sides being secured together at their ends, and of form transversely as shown in cross-section at Fig. 3. To the bottom of the sides are attached cog-bars; to the right end of bed is bolted a series of clamps, one of which is shown in Fig. 1; and to the left end is bolted a dissimilar device for the same purpose. The former clamp consists of two similar parts, *o*, jointed at the rear end, and the faces held apart by a small spiral spring. The lower part is riveted to the cross-piece of the bed. Nearly over the center is pivoted an eccentric-lever, *m*, by a forward movement of which the jaws of the clamp are brought together. The clamp at the left end is similar as to the matter of support and the lever *m*.

The leather-clamp *n* consists of a lengthened lever with a handle at one end and pivoted plates carrying a pin, which engages the leather between it and a serrated incline, at the opposite end.

The frame B is supported on bevel-edges on

the lower part of the bed with the usual arrangement of gib to tighten the same. Supported on this frame, and inclosed within the bed, is the support P, with vertical bearings against the sides of the bed, and the bearing to the right is provided with a gib. On this support are secured the punching-plates L, which plates have transverse channels to serve as guides for the leather strips, and orifices to receive the several punches. These punching-plates are represented at Figs. 8 and 9.

In the lower part of the frame are bearings for the shaft T, which carries two cog-wheels, M, which engage the cog-bars of the bed. External to the bed is supported on said shaft the ratchet-wheel D. Between this wheel and the frame the shaft supports the arm E, which moves freely on the same. When carried forward the spring I carries it back. One end of this spring embraces the arm and the other is attached to the frame.

The shaft V, supporting the balance-wheel C, has a bearing above the middle of the frame. This shaft carries the arm J, which, when rotated, engages the arm E and carries it forward. The pawl W, carried by this arm, engages the ratchet-wheel, and thereby causes the frame to move along the bed. The arm E is held to the shaft by a set-screw, and the movement of the frame is thereby regulated, as the distance moved is dependent on the distance this arm is carried by the arm of the upper shaft.

H is a slide having a rear projection to carry a series of solid punches, and is supported within a channel of the frame on bevel-edges, the same being tightened by the usual gib. The permanent part is shown at Fig. 3, and the clamping-piece U is held to the permanent part by bolts, and is shown at Fig. 2 embracing a punch. An angular clamping-plate, U, is shown at Fig. 7, the projection of which holds the punches from slipping upward. The arm G connects the slide to the crank S of the upper-shaft, and the requisite reciprocating movement to operate the punches is thereby given.

At X, Fig. 5, is represented a device for holding down the leather strips onto the punching-plates, and it consists of a plate held loosely on the vertical part of the frame, and is operated by a hand-lever pivoted to said parts. To the lower end is attached a horizontal perforat-

ed plate, which is pressed down upon the strips to release the punches from said strips as they are being withdrawn.

The operation is thus: Suitable strips of leather are placed in the clamps at the right end, and the opposite ends secured in the clamps at the left end. The strips are then drawn fast and made fast by the eccentric-lever. By turning the hand or balance wheel the punches move down and punch the holes in the leather. When the punches are out of the leather the frame is made to move along its bed, and after another series of holes are punched, and so on successively until the strips are punched from end to end with regularly-intervening spaces, the spaces being regulated by the position of the arm on the shaft, as before described.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a leather-punching machine, the shaft T, carrying the cog-wheels M, which engage the cog-bars of the bed A, and the ratchet-wheel D, the arm E, with pawl W to engage said ratchet-wheel, said arm being operated by the cam J of the driving-shaft V, the movement in one direction being given by said cam and in an opposite direction by the spring I to

move the punching-frame at intervals along the bed, the whole combined and operated substantially as set forth.

2. The frame B, supported on a suitable bed, which admits of a free movement longitudinally on said bed, the slide H, to which a series of punches are secured by plate U, the said slide having a reciprocating movement given by crank S of shaft V through the connection-arm G, and the channeled punching-plate L, the whole combined substantially as set forth.

3. The handle n, with clevis-like attachment in relation to a serrated incline of said handle, in combination with the eccentric-lever m, supported by ears bolted to end of bed, substantially as set forth.

4. The combination of the adjustable hand-clamp and the permanent clamp at opposite ends of the bed, and the channeled punching-plate L, for the purpose of holding leather strips taut and in position during the operation of punching, in the manner substantially as set forth.

WASHINGTON FOGLESONG.

Witnesses:

SUMNER T. SMITH,  
B. PICKERING.