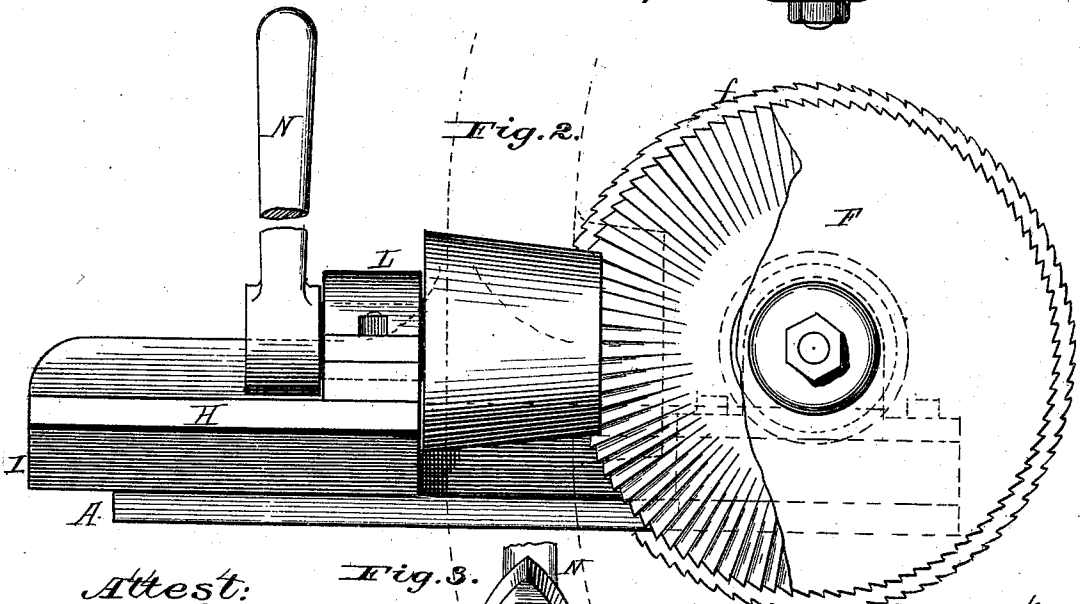
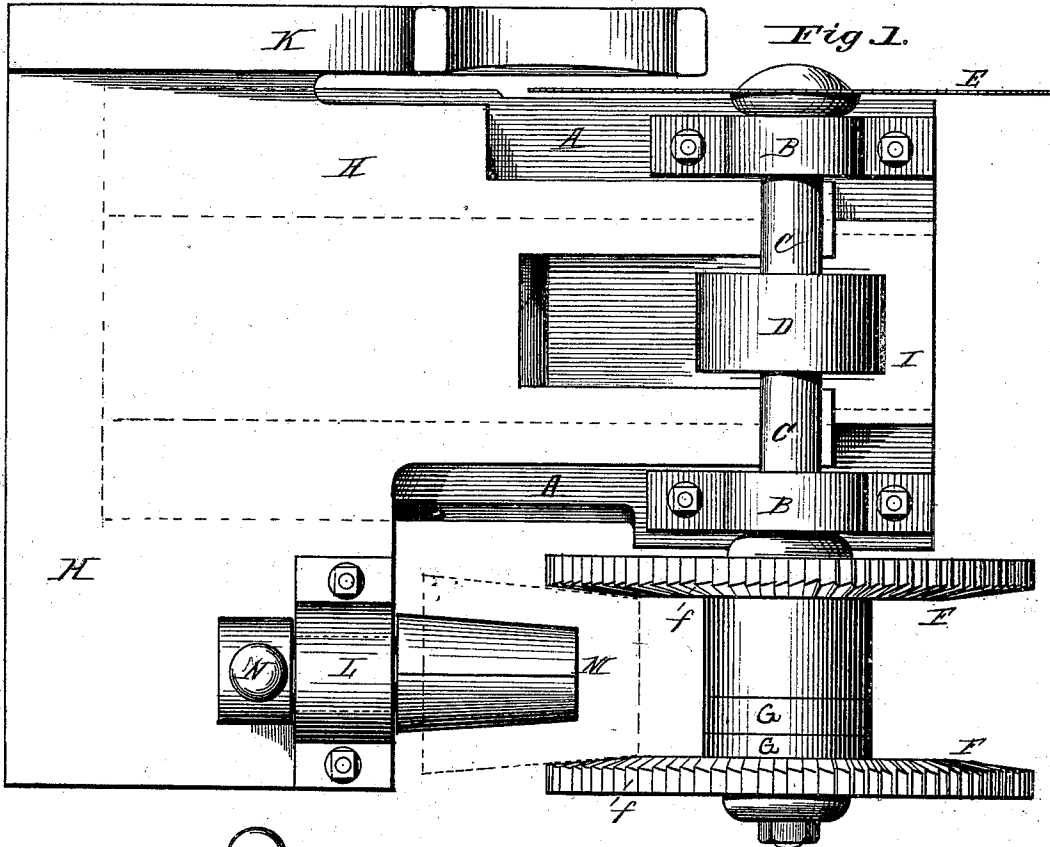


J. C. KLEIN.

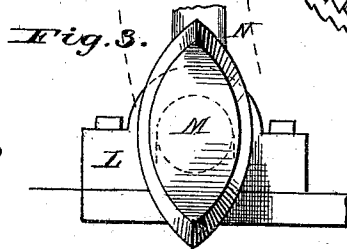
MACHINES FOR DRESSING THE EYES OF PICKS.

No. 172,130.

Patented Jan. 11, 1876.



Attest:
W. L. Perrine
John L. Brown



Inventor:
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 By *James L. Norris*
att'y

UNITED STATES PATENT OFFICE

JOHN C. KLEIN, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR DRESSING THE EYES OF PICKS.

Specification forming part of Letters Patent No. **172,130**, dated January 11, 1876; application filed December 8, 1875.

To all whom it may concern:

Be it known that I, JOHN C. KLEIN, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Machine for Dressing the Eyes of Picks, of which the following is a specification:

This invention relates to an improved machine for trimming and dressing the eyes of picks, mattocks, and other like articles; its object being to cut and remove the rough edges left around the eye-socket of the picks after the operation of forging, and remove the roughened outside portions around the socket, and dress and finish the same in a better and more expeditious manner than heretofore accomplished.

My invention consists in a strong bed or frame, provided with standards or uprights of suitable strength on top, in which is journaled a horizontal shaft, carrying at one end a circular saw or cutting-disk, and at the other end two parallel dressing-disks, said bed or frame being also provided with a sliding table or carrier, to one side of which is secured a suitable rest for the pick or mattock, and by which it can be presented in proper position to the action of the saw, the other side of said frame being provided with an upright standard, in which is journaled a mandrel, which can be partially rotated, upon which the pick can be mounted and presented to the action of the dressing-disks, as more fully hereinafter described.

In the drawing, Figure 1 represents a top view of my improved machine; and Fig. 2, a side elevation, with a portion of one of the dressing-disks broken away to show the grinding or cutting surface of the opposite disk.

The letter A represents a strong and solid bed or frame, of cast-iron or other material of requisite strength, provided at one end with two upright standards, B B, either cast with the said frame, or bolted or secured thereto in any suitable manner that will insure the requisite strength. In said standards is journaled a horizontal shaft, C, which is provided with a pulley, D, by which motion may be transmitted to said shaft through the medium of a band, driven by suitable motive power. The letter E represents a circular saw or cutting-

disk, of properly-tempered steel or other suitable material, mounted on one end of the shaft C, and revolving with it. Upon the other end of said shaft are mounted two parallel dressing-disks, F, of properly hardened and tempered steel or other suitable material. The inner sides of said disks are beveled at an angle depending upon the amount of bevel to be given to the outside portion of metal around the socket or eye of the pick, and are provided with radial cutting-teeth or ledges *f*. In order to provide for dressing different-sized picks or mattocks said disks are adjustably mounted, in such manner that they may be set together or apart to the proper distance for the purpose, which is determined by means of the removable rings or washers G, secured upon the shaft between said disks. The circular saw and said cutting-disks may be secured to the shaft in any convenient manner. In the present instance they are shown as confined between shoulders on said shaft and screw-nuts fitting over the outer ends of the same. The letter H represents a strong frame, of suitable material, secured upon an angular way, I, formed upon the upper face of the bed A, in such manner as to move freely back and forth thereon. Said frame is provided at one side with a rest, K, having a concave recess, similar in conformation to the outer portion of the pick, around the eye of the same, in which said portion can be placed and secured, so as to present the rough ends of said portion to the action of the saw, the sliding frame being moved toward the saw by means of any suitable motive power through the medium of any convenient gearing in ordinary use for similar purposes. The letter L represents a standard or upright, attached to that portion of the frame H directly in front of the dressing-disks. In said standard is journaled a mandrel, M, to which a rotating motion in either direction may be given by means of a lever, N. The end of said mandrel opposite the cutting-disks is made conical or tapering in shape, in order that the eye of the pick may be set over and secured upon the same; and said end of the mandrel may be divided, if desired, to give it a slight spring, so as to more readily hold and secure the pick.

In operation, each pick, as delivered from

the forging press or dies, is placed in the concave recess in the rest at the side of the sliding frame H, and the said frame is advanced, presenting the rough end of that portion of the metal around the eye to the action of the saw for the removal of the same. After removal the position of the pick is reversed, so as to present the opposite edge to the saw. When both edges have been trimmed the pick is placed upon the conical end of the mandrel, in front of the dressing-disks, and the frame is moved forward, so as to carry the pick properly between the same, when, by rotating the mandrel, the roughened portions of the metal around the eye will be trimmed and dressed to proper shape.

What I claim, and desire to secure by Letters Patent, is—

1. In a machine for trimming and dressing picks and mattocks, the combination of the rotary trimming-disks and rotatory mandrel, for holding the pick and presenting the same to the action of said cutting-disk, substantially as described.

2. The combination of the horizontal shaft, journaled in standards in the frame A, and carrying the cutting-saw and trimming-disks, with the sliding frame and the rest and rotatory mandrel, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

JOHN C. KLEIN.

Witnesses:

JOHN HUFFMAN,
WM. F. WILLOCK.