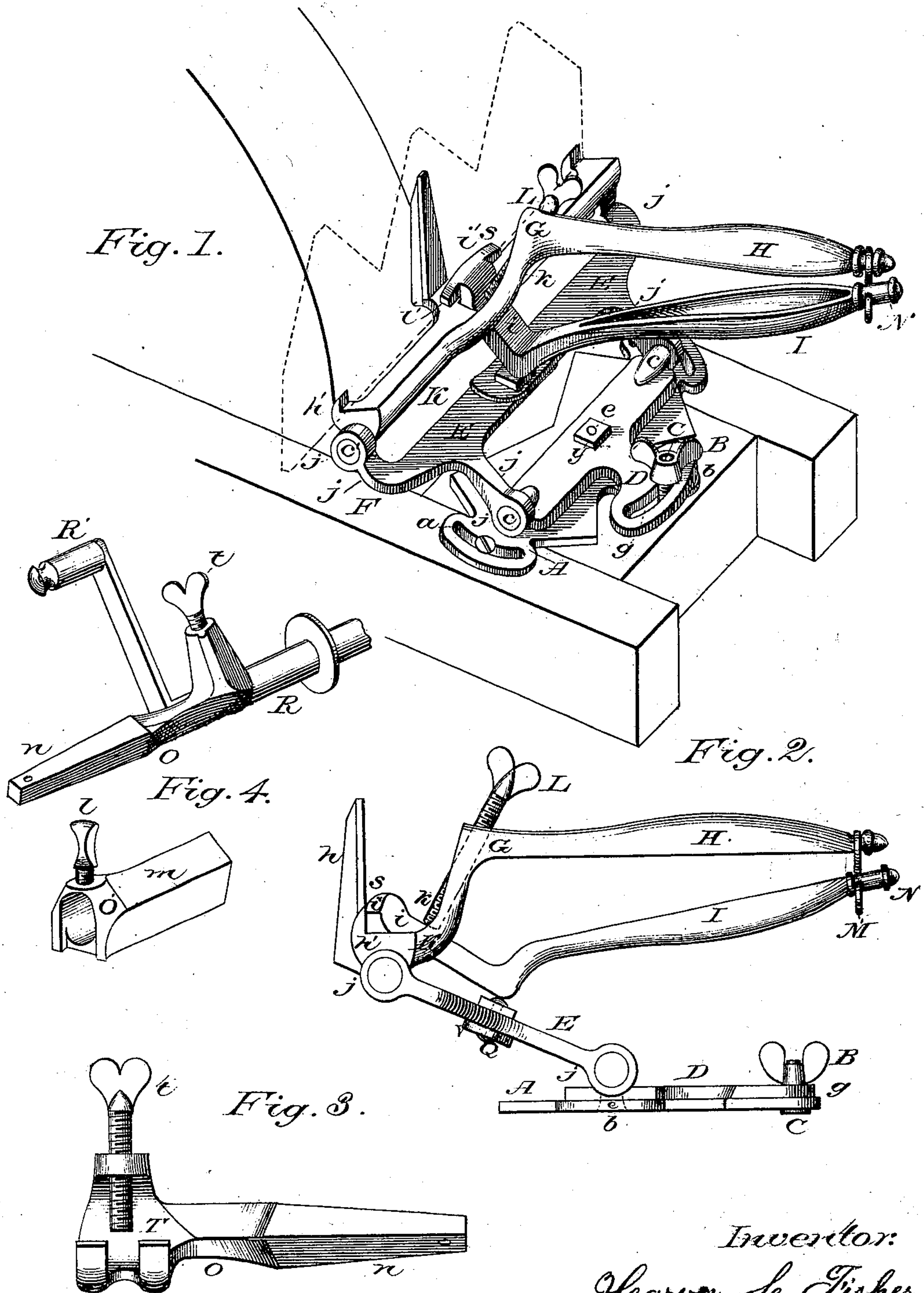


H. L. FISHER.
Sickle Holder.

No. 230,118.

Patented July 20, 1880.



Witnesses:
Will Clark
G W Ingersoll

Inventor:
Harvey L. Fisher

UNITED STATES PATENT OFFICE.

HARVEY L. FISHER, OF TOLEDO, IOWA.

SICKLE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 230,118, dated July 20, 1880.

Application filed December 8, 1879.

To all whom it may concern:

Be it known that I, HARVEY L. FISHER, of Toledo, in the county of Tama and State of Iowa, have invented certain new and useful Improvements in Holders for Sickles, Knives, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in sharpeners for sickles, harvesters, &c., the object being to provide a machine which may be readily secured at any desired angle to the frame of a grindstone, and the sickle or knife holder adapted to be readily moved to or from the face of the stone; and to this end my invention consists, first, in the combination, with an adjustable base, of double-hinged plates or bars, the upper one provided with a rigid handle having a set-screw and a loosely-arranged holder for clamping the blade to be sharpened between a lug on the upper plate and the engaging end of the holder.

My invention further consists in the several details of construction and combinations of parts, as will more fully appear from the following description and claims.

In the accompanying drawings, Figure 1 is a view, in perspective, of a grindstone having one of my improved machines attached to the grindstone-frame, having a sickle secured thereto, with handle attachment on treadle side of stone. Fig. 2 of the drawings is a representation of a side elevation of my improvement. Figs. 3 and 4 of the drawings are representations of the attachments for crank or handle on the treadle side of grindstone.

A represents a plate of any desired length, and provided with slots *a a* on each end thereof, for securing and adjusting the plate A on the frame F of the grindstone. *b* is a hole in the center of plate A, for the reception of a central or pivot bolt, *e*, which extends through the adjustable base-plate D, and is secured by a nut, *y*. *b'* is a hole in the rear of the center of plate A, for the reception of bolt C, which extends through slot *g* in the adjustable base-plate D, and is secured by a thumb-nut, B.

By loosening nut B the base D may be turned to any desired angle to the plate A, and secured by again tightening the thumb-nut B.

E E are plates provided at one end with hole V, registering and secured in the center by bolt or rivet Q, forming a bar with perforated arms *j j*, the upper and lower sides of which are secured on journals *c c*, on each end of plate D, and ends *c' c'* journaled on the holder-bar K.

To the central portion of holder-bar is secured or cast solid therewith a guide, G, provided with an opening, *k*, and from guide extends a handle, H. The front edge of holder-bar K is provided with central lug, *h*, and end lugs, *h'*, which serve as rests for the sickle.

I represents an adjustable holder, the forward end, *i*, of which extends through the opening *k* in the guide G, and is prevented from being displaced by means of the laterally-projecting shoulder *i'*. The rear end of adjustable holder is provided with a collared end, N, or an equivalent device, which engages a clasp, M.

L is an inclined set-screw extending through the upper portion of the guide G at an angle of about forty-five degrees to the central lug, *h*, and engages with the inclined plane of the adjustable holder-bar, thereby securing for it a forward as well as a downward movement. The handle H is depressed, so that it can be easily grasped with the hand of the person grinding.

O represents an attachment, of any desired length and size, having provided at one end a clamp, T, so constructed as to fit any size stone hangings or journals R, and fastened with thumb-screw *t*, having its outer end, *n*, so constructed as to fit any size crank or handle of stone-hangings.

O' represents an attachment, of any desired length or size, so fitted to the treadle end R' of hangings and fastened by thumb-screw *l*, and having its outer end so constructed that the crank or handle can be attached and lengthened or shortened at the pleasure and advantage of the one grinding.

The operation of my machine is as follows: The plate A is first secured to the frame of the grindstone and holder placed thereon, and se-

cured thereto by bolts *e* and *C*. The sickle is then placed on the holder-bar with one side resting against the central and end lugs, *h* and *h'*. The end of the adjustable holder is then
 5 forced snugly against the opposite side of the sickle, after which the inclined set-screw *L* is forced against the inclined plane on the adjustable holder, so that clamp on end of holder can just be fastened over the collared portion
 10 at rear end of adjustable holder by tightly grasping the handle *H* and the holder-bar *I*, which causes the sickle to be securely held between face *s* and lugs *h h'*. After the blade has been thus secured the base-plate is ad-
 15 justed at any desired angle to the face of the stone, according to the contour of the edge of the blade or according to the bevel to be imparted to the cutting-edge. After sharpening one section the clasp is loosened and the sickle
 20 passed along the holder *K* to the next place to be ground, and the clasp again secured by grasping handle and holder-bar, thereby doing away with the necessity of working the inclined thumb-screw only to adjust it to the
 25 sickle-bar. After grinding one side of all the sections, by loosening thumb-nut *B* the base-plate *D* is adjusted at the opposite angle to the face of the stone, according to the bevel to be imparted to the cutting-edge, bringing
 30 the part ground on the other edge of the stone, keeping a true face thereon.

To enable me to grind when the sickle is at an angle passing over the crank, I use one of the attachments, *O* or *O'*, on the treadle side

of the grindstone, and place crank thereon, 35 making it easy to grind without sickle coming in contact with the handle, thus doing away with the necessity of moving machine from one side of the stone to the other in order to grind all the sections. 40

By means of the double hinge the sickle or knife may be freely moved toward or from the stone, as a considerable range of movement is secured.

It will be observed that while my improved 45 machine is adapted to be readily manipulated and allow many forms of cutting implements to be ground thereon, the parts of the machine are few in number, and are durably constructed and not liable to need repairs. 50

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

1. As a means of attaching a handle to the shaft or to the treadle end of the crank of a 55 grindstone, a hollowed attachment provided with a set-screw and an end shaped to fit the handle, substantially as shown and described.

2. The plate with slots *a a* and hole *b*, in combination with base-plate *D*, having slot in 60 rear of center and journals *c c*, plates *E E*, with hole *V* and perforated arms *j j*, holder-bar *K*, with inclined thumb-nut *L*, and depressed handle *H*, substantially as set forth.

HARVEY L. FISHER.

In presence of—

A. J. HASSELL,

G. W. INGERSOLL.

*1.5 to 0
mord.*