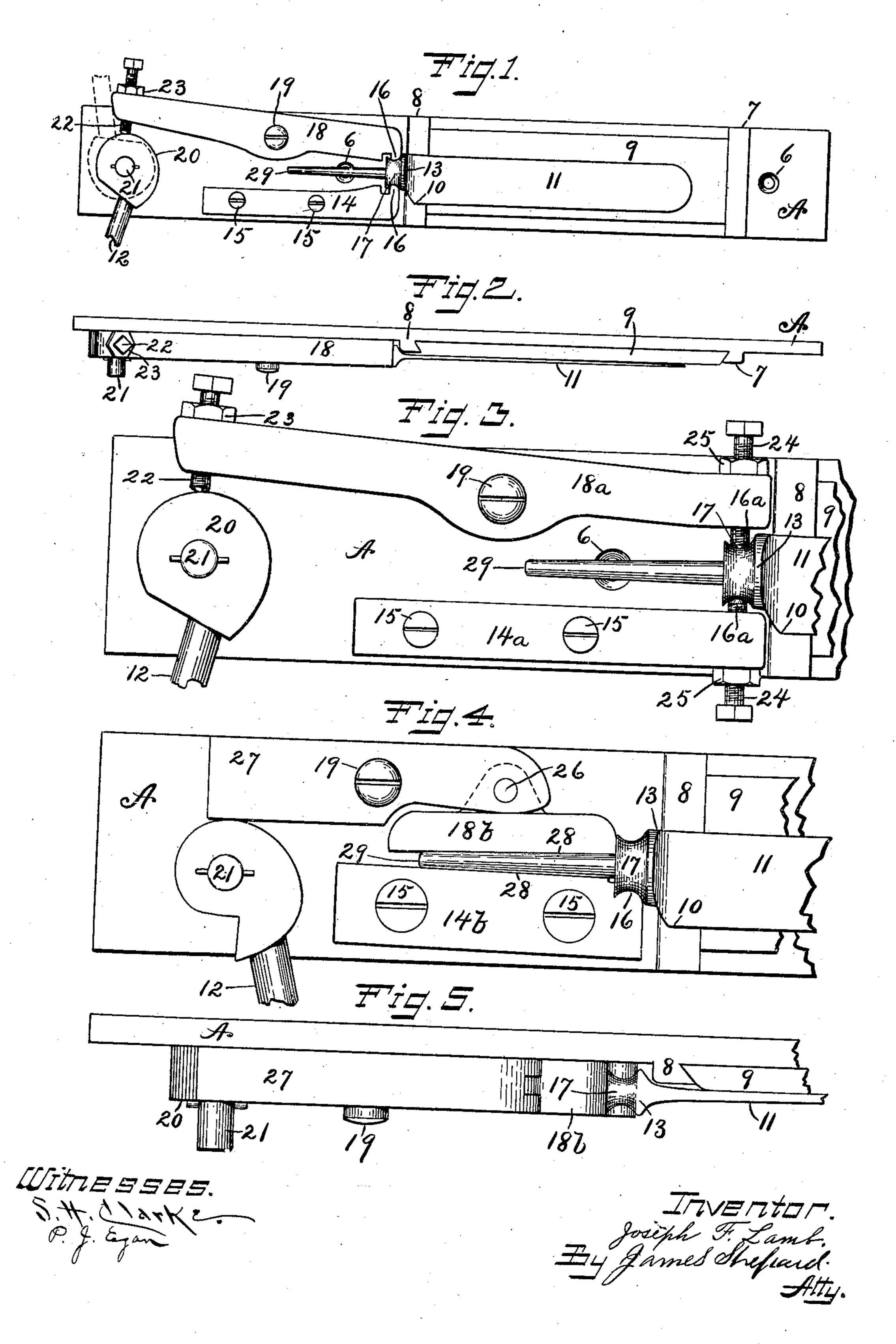
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KNIFE HOLDER FOR GRINDING AND GLAZING MACHINES.

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## UNITED STATES PATENT OFFICE.

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## KNIFE-HOLDER FOR GRINDING AND GLAZING MACHINES.

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To all whom it may concern:

Be it known that I, Joseph F. Lamb, a citizen of the United States, residing at New Britain, in the county of Hartford and State 5 of Connecticut, have invented certain new and useful Improvements in Knife-Holders for Grinding and Glazing Machines, of which the following is a specification.

My invention relates to improvements in 10 knife holders for grinding and glazing machines, and the objects of my improvement are convenience and efficiency in operation.

In the accompanying drawing:—Figure 1 is a front view of my knife holder, together 15 with a knife held therein. Fig. 2 is a plan or edge view of the same. Fig. 3 is an enlarged front view of the main parts of my knife holder, of a somewhat different form and with part of a knife held therein. Fig. 4 is a 20 like view of the same in a still different form, and Fig. 5 is an edge view of the parts shown

in Fig. 4. A, designates the bed or base by which the holder is secured to the machine in its proper 25 position in any proper manner, as for example by means of screws extending through the screw holes 6 into threaded holes in the part to which it may be secured. This bed A is of a plate-like form and is provided with 30 transverse ledges 7 and 8 to receive and hold the knife blade seat 9, which may be of a shape and thickness to fit one of the broad sides of the knife blade that is to be seated thereon. The ledge 8 is located in about the 35 position that the heel 10 of the knife blade 11 will be placed when held within the holder, and that corner of the ledge 8, that is farthest from the blade seat 9 is rounded off as shown, so as to clear the bolster 13. Adjacent to 40 the ledge 8 a fixed jaw 14 is firmly secured to the bed A in any proper manner, as by means of screws 15. The said jaw is provided at its end the end nearest the knife blade seat with a transverse holding face 16 which is

1. The companion jaw 18 is in the form of a lever carrying one of the jaws and extending longitudinally of the bed A. It is pivoted on 50 the bed A by a post or screw 19 to move in a plane parallel to the face of the said bed and carries a holding face 16 like that of the fixed

45 narrow and rounded in front view so as to fit

the neck 17 of the bolster 13 as shown in Fig.

55 bed A for moving in the plane of the lever | in place so that it cannot move endwise on 110

jaw 18 and provided with an operating handle 12 which is represented as broken off. The cam is for forcing the jaws firmly together upon the neck of the bolster so as to hold a knife as it lies with one broad side of 60 the blade on the knife seat, as shown in Figs. 1 and 2. For the purpose of adjusting the lever jaw so as to grasp or hold knives of different sizes, I provide the cam end of the lever jaw with an adjusting screw 22 to bear on 65 the cam as shown, instead of having the cam bear directly on the lever. I also prefer to employ a set nut or lock nut 23, to hold the adjusting screw in its adjusted position.

The same holder is shown in Fig. 3, ex- 70 cepting that the fixed jaw 14<sup>a</sup> and lever jaw 18 have their jaw face formed by the rounded ends 16° of adjusting screws 24, that extend through threaded holes in the grasping ends of these jaws. The rounded ends of 75 the adjusting screws bear in the neck 17 of the bolster and hold the knife with one broad side of its blade on the blade seat 9, as shown. These screws may also be provided with set nuts 25.

In Figs. 4 and 5, the fixed jaw 14b is substantially the same as that of Figs. 1 and 2, and has the same jaw face 16 to fit in like manner the neck of the bolster. The companion jaw 18<sup>b</sup> is quite different. Instead of 85 being formed directly on the end of a lever or rigidly fixed on the end of a lever, it is a swinging or rocking jaw pivoted by a pin 26 to a lever 27 mounted on the bed A by a post or screw 19, the same as the lever jaws are 90 mounted thereon. It is actuated by a cam 20 the same as in the preceding views. Both of the jaws 14<sup>b</sup> and 18<sup>b</sup> have straight jaw faces 28 for bearing upon and holding the tang 29 as shown. When the jaws thus bear 95 upon the tang it is only necessary to have one of the jaws, preferably the fixed jaw, engage the neck of the bolster.

In all of the constructions shown, the hold or grasp on the knife is released by turning 100 the operating handle 12 of the cam in the direction to raise said handle and to bring a lower or less projecting part of the cam opposite the end of the lever, as indicated by broken lines in Fig. 1. The jaws may be 105 readily opened by pressing the end of the lever towards the cam. Grasping the bolster of the knife by its neck when the blade rests on the knife seat 9, will firmly hold the knife

its seat. In Figs. 1, 2 and 3 the pinch of the jaws may be adjusted by means of the adjusting screw 22 to vary the bearing position on the cam. In the construction shown in Fig. 3 a triple adjustment of the pinch of the jaws is had through the adjusting screws 22 and 24, the first adjusting the range of closure of the jaws, while the two latter screws 24 will center the knife properly between two 10 jaws. The one jaw 16a for engaging the bolster neck, as in the construction shown in Figs. 4 and 5, has the same office of holding the knife against longitudinal movement on its blade seat that is had by the jaws 16 in 15 the other views, although the pinch is due to the swinging jaw which bears on the tang and presses the knife tang and bolster neck firmly against the fixed jaw 14b.

I claim as my invention:—

1. In a knife holder for grinding machines, the combination of a suitable bed with a knife blade seat mounted thereon for one broad side of the knife blade to rest upon, a fixed holding jaw mounted on the said bed near one end of the said knife blade seat, a lever extending longitudinally of the said bed and pivoted thereon to move in a plane parallel to the face of the bed A, an opposing jaw carried by the outer end of the said lever, a jaw face that is adapted to bear on and engage the neck of the knife bolster, and a cam

pivoted on the said bed for moving in the

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plane of the said lever and acting upon the said lever to close the jaws by a movement parallel to the said bed and in the edgewise 35 direction of the knife blade.

2. In a knife holder for grinding machines, the combination of a suitable bed with a knife seat mounted thereon, a fixed jaw mounted on the said bed, an opposing jaw 40 arranged to move to and from the said fixed jaw, a jaw face that is adapted to bear on and engage the neck of the knife bolster, a lever carrying one of the said jaws and mounted on the said bed, an adjusting screw in one end of 45 the said lever and a cam for acting on the said lever through the said adjusting screw to force the jaws together.

3. In a knife holder for grinding machines, the combination of a suitable bed with a 50 knife seat mounted thereon, a fixed jaw mounted on the said bed, an opposing jaw arranged to move to and from the said fixed jaw, a lever carrying one of the said jaws, an adjusting screw carried on one of the jaws 55 and having a jaw face that is adapted to bear on and engage the neck of the knife bolster, and a cam for acting on the said lever to force the jaws together.

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Witnesses:

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