

(No Model.)

A. P. HENDERSON.
CENTERING DEVICE.

No. 436,526.

Patented Sept. 16, 1890.

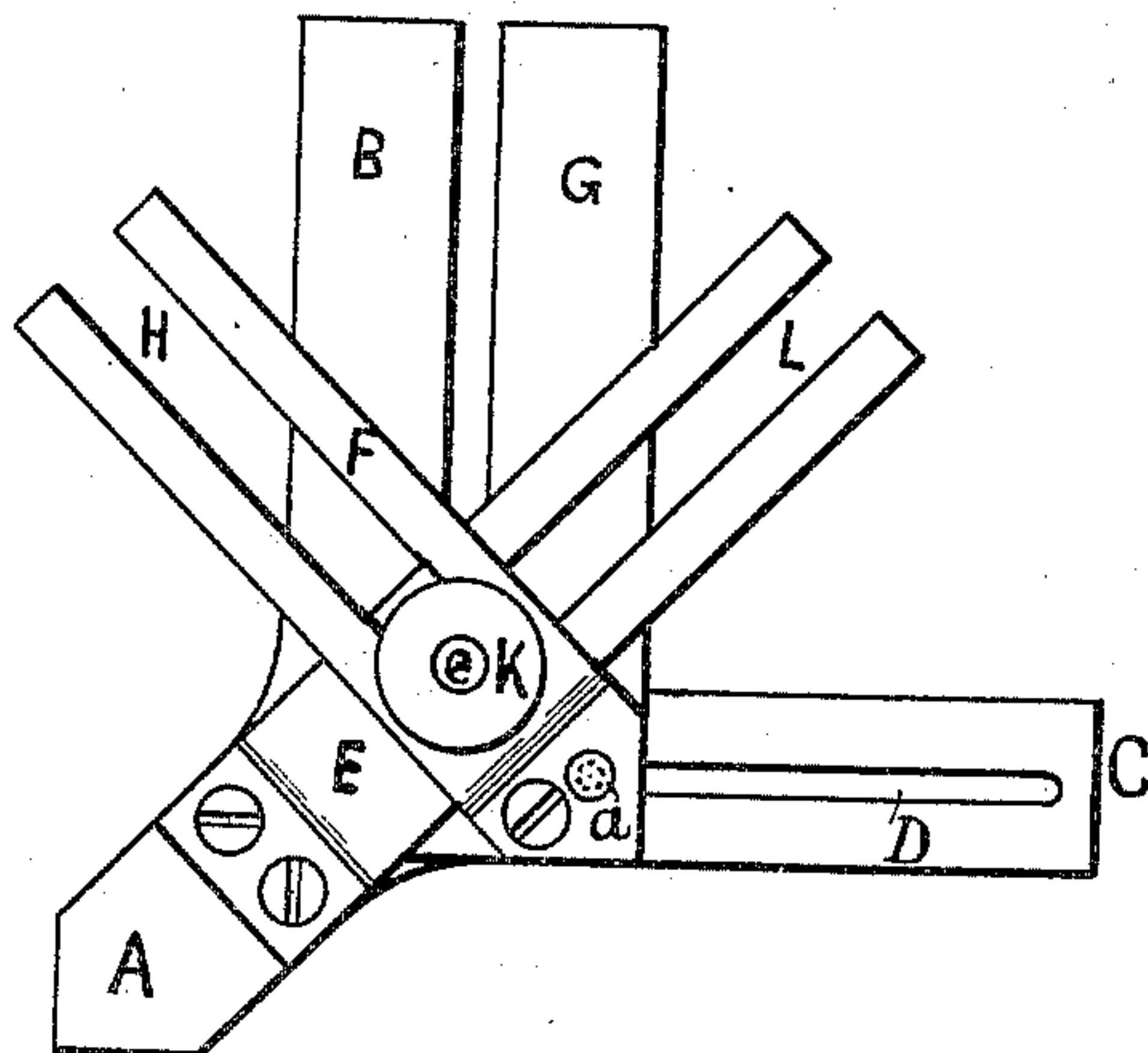


Fig. 1.

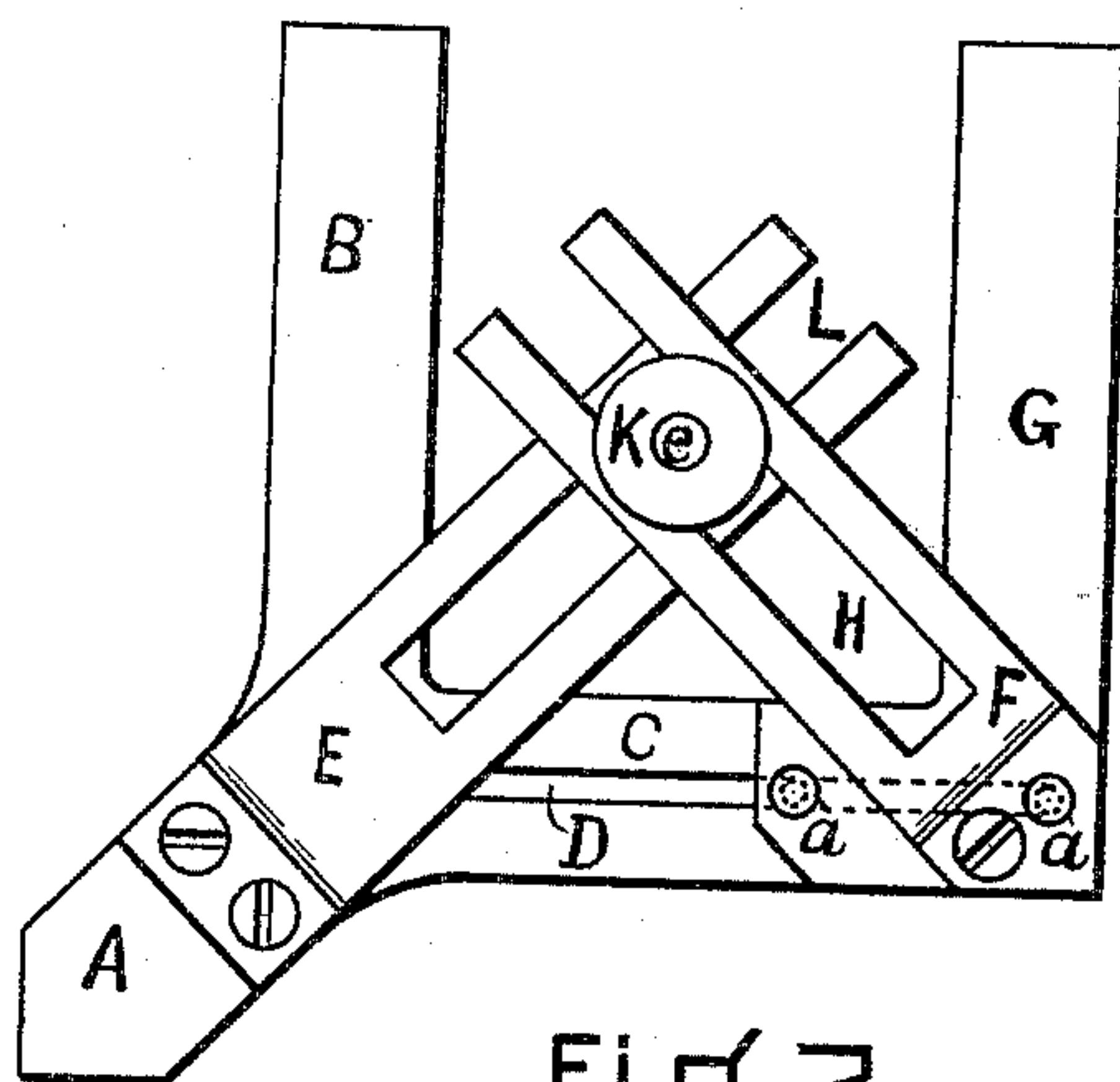


Fig. 2.

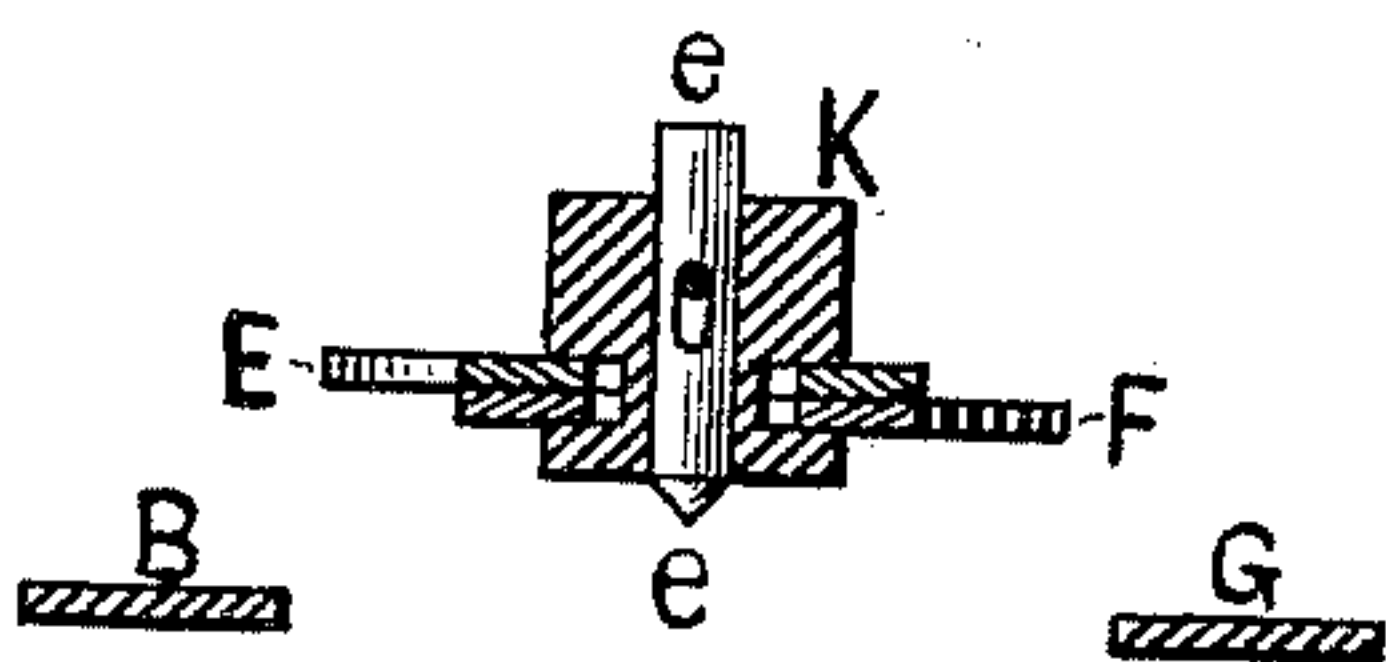


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

ALONZO P. HENDERSON, OF HANOVER, MASSACHUSETTS.

CENTERING DEVICE.

SPECIFICATION forming part of Letters Patent No. 436,526, dated September 16, 1890.

Application filed June 3, 1890. Serial No. 354,156. (No model.)

To all whom it may concern:

Be it known that I, ALONZO P. HENDERSON, of Hanover, in the county of Plymouth and State of Massachusetts, have invented an Improvement in Centering Devices, of which the following is a specification.

The object of my invention is to provide a cheap, simple, and convenient adjustable centering device for "prick-punching" or marking the center on the end of a square or cylindrical rod or bar of iron preparatory to turning the same in a lathe or fitting such rod or bar, requiring the exact center to be ascertained and marked in a ready and expeditious manner; and it consists in the construction, combination, and arrangement of the several parts of the device, as hereinafter more fully described, and specifically set forth in the claim.

Figure 1 represents a front elevation showing a centering device, constructed according to my invention, in a closed position. Fig. 2 represents a similar view showing the same in an open or extended position. Fig. 3 represents a horizontal cross-section of the same.

In the drawings hereto annexed and which form a part of this specification, A represents a handle portion by which the device may be conveniently held and applied to the end of a bar of iron or other metal about to be centered. This portion A is provided with an extended vertical arm B and a right-angle horizontal arm C, provided with a longitudinal slot D, within which the rivets *a*, passing through the angle end portion of the adjustable vertical arm G, slide freely when the said arm is moved toward or from the vertical arm B in operating the centering device. The portion A, having the arms B C, has secured to one side thereof an oblique arm E, provided with a longitudinal slot L, and the angle portion of the said adjustable arm G has secured thereto the oblique arm F, provided with a longitudinal slot H, as shown. These oblique slotted arms E and F cross each other at right angles and slide together freely in operation, and within the slots H and L thereof is affixed the axis of the centering hub K, which has provided a central hole or opening within which is loosely fitted and secured the cen-

tering punch *e*, adapted to be moved or slid therein a short distance, and is retained therein by means of a short opening or oblong hole and of a pin passing from one side of the hub K and entering therein, as shown in Fig. 3. Now it will be seen and understood that if a bar or rod of either square or round iron be placed between the slotted arms B G, and the inner edges thereof be brought in contact with the opposite sides of the same, the action of the oblique slotted arms B G upon the hub K will be to carry it exactly over the center of the end of such rod or bar. Then a slight blow upon the head of the punch *e* will cause the opposite point end to enter or indent the said rod or bar and thus show the exact center thereof, as desired.

I am aware of the English Patent of 1885, No. 1,150, for a centering device, consisting of a pair of frame-bars upon which are fitted, free to slide longitudinally and projecting perpendicularly, a pair of slotted bars, embracing and holding the guide of a spring-pressed centering punch therefrom, and free to slide longitudinally thereon. Therefore I disclaim, broadly, such invention, it being complicated and difficult of adjustment and application to the bar to be centered and imperfect in operation, and also very much more expensive than my improved device shown and described above.

Having thus described my invention, I claim—

A centering device consisting of the arm B, having a rigid right-angle arm C, provided with a slot D, the adjustable arm G, guided by said slot D and adapted to be moved toward or from the said arm B and parallel therewith, and having rigidly affixed thereto the oblique arm E, having a slot L, the rigidly-affixed oblique arm F, having the slot H, and the hub K, adapted to slide in said slots L and H and provided with the centering punch *e*, all being constructed and arranged substantially as shown and described.

ALONZO P. HENDERSON.

Witnesses:

SYLVENUS WALKER,
WILLIAM H. PARRY.