## J. BIRKENHEAD.

## ANVIL FOR LATHES.

No. 303,976.

Patented Aug. 26, 1884.

Fig. 1

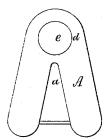
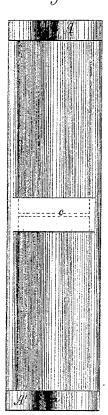


Fig. 2.



Witnesses S.N.Pipes E. O.P. ++

Fig. 4.

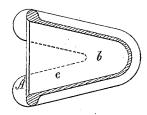
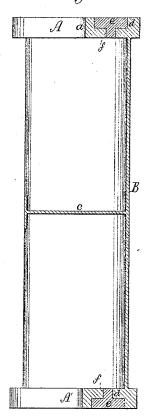


Fig.3.



Inventor. John Birkenhead. by R.K.Edz. ally

## UNITED STATES PATENT OFFICE.

JOHN BIRKENHEAD, OF MANSFIELD, MASSACHUSETTS.

## ANVIL FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 303,976, dated August 26, 1884.

Application filed November 9, 1883. (No model.).

To all whom it may concern:

Be it known that I, John Birkenhead, of Mansfield, in the county of Bristol, of the Commonwealth of Massachusetts, have invented a 5 new and useful lathe anvil or device for supporting an article or piece of work for detaching from or fixing thereto an arbor or spindle; and I do hereby declare the same to be described in the following specification, and repto resented in the accompanying drawings, of

Figure 1 is a top view, Fig. 2 a front elevation, Fig. 3 a vertical and longitudinal section, and Fig. 4 a horizontal and transverse 15 section, of it.

The said device is a new manufacture or article for use by and convenience of turners, and is intended to be set up near a lathe.

The nature of the invention is defined in the

20 claims hereinafter presented.

The article I term a "lathe-anvil," in order to distinguish it from ordinary anvils used by "smiths."

In the drawings, A denotes a furcated or 25 angularly-notched head, the notch or crotch of which is shown at a. The said head is supported on a stand, B, similarly recessed, as shown at b, and provided at or near its middle with a transverse brace or partition, c. The 30 drawings show the article as having two notched heads, A and A', the lower one, A', being in construction like the upper one, A; but instead of the said lower head a simple partition extending across the stand may be 35 employed and serve as a foot or base for supporting it. Each head, in rear of the vertex of its angular notch, has an open chamber, d, in it, containing a filling, e, of lead or other proper soft metal, there being extended from the 40 bottom of the chamber and through the head a hole, f, to enable such metal in a molten

state to be run into the chamber, when the anvil is inverted, and may rest on a flat surface. The brace answers as a shelf for supporting a 45 hammer or other device or devices.

To use the anvil, we will suppose that a

wheel or other article is to be detached from an arbor going through it axially; we have only to place the arbor closely up within the crotch of the head A, with the wheel or piece 50 of work resting upon the upper surface of such head. In this state of things the arbor may be driven out of the wheel or piece of work by a hammer or tool struck on the upper end of it, (the said arbor.) So, while a wheel or piece 55 of work may be on the head, an arbor may be inserted and driven into such wheel or piece of work. In either case this may be effected without first requiring the removal of a dog when fixed on the arbor, and for use in a lathe 6) for preventing the arbor from revolving independently of the rotary spindle of such lathe.

The said lathe anvil is to be made of cast-

iron, and its head should be plated with steel or be chill-hardened, to prevent it from being 65 injured by the work. The block of soft metal inserted in the head is to enable an arbor to be detached from a piece of work by striking the arbor, end downward, upon the said block. Were the arbor struck on the face of the head, 70 the end of the arbor would be liable to be injured thereby.

I claim-

1. The described lathe-anvil, consisting of the furcated or notched head or heads and the 75 recessed stand extending therefrom, as set forth.

2. The lathe-anvil consisting of the furcated or notched head or heads and the recessed stand extending therefrom, and provided with 80 the transverse brace arranged in it, as set

forth.

3. The lathe anvil consisting of the furcated or notched head or heads, and the recessed stand extending therefrom, and of the block 85 of soft metal inserted in one or each of such heads, all being substantially and for use as represented. JOHN BIRKENHEAD.

Witnesses:

R. H. Eddy, E. B. PRATT.