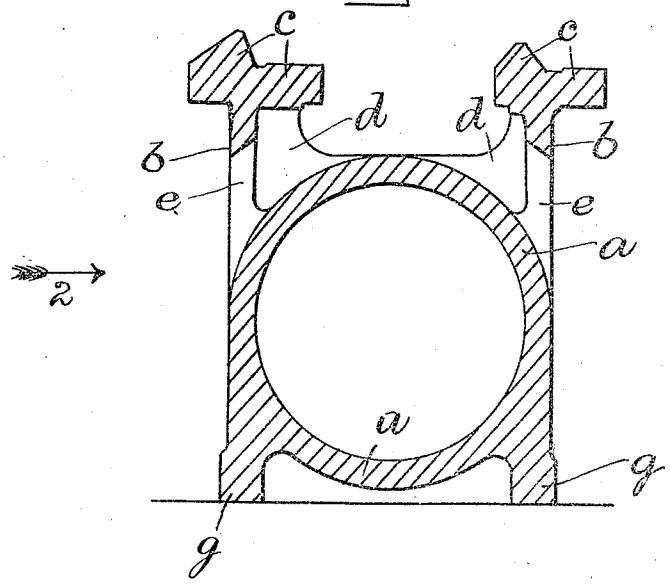
G. W. & A. McWILLIAM.

BED FOR LATHES AND GRINDING AND LIKE MACHINES.

APPLICATION FILED NOV. 17, 1917.

1,293,148. Patented Feb. 4, 1919.

Fig. 1



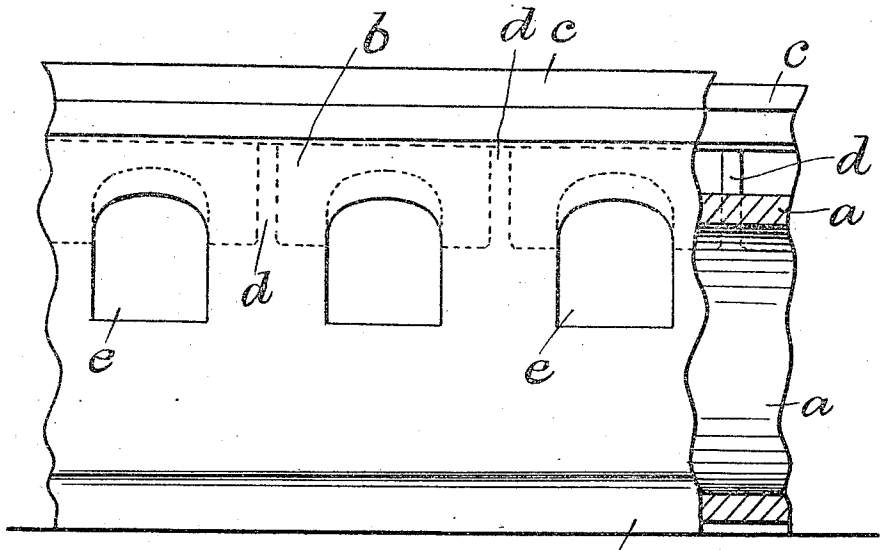


Fig. 2

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UNITED STATES PATENT OFFICE.

GEORGE WILLIAM McWILLIAM AND ALEXANDER McWILLIAM, OF BOLTON, ENGLAND.

BED FOR LATHES AND GRINDING AND LIKE MACHINES.

1,293,148. Specification of Letters Patent. Patented Feb. 4, 1919.

Application filed November 17, 1917. Serial No. 202,655.

To all whom it may concern:

Be it known that we, GEORGE WILLIAM McWILLIAM and ALEXANDER McWILLIAM, subjects of the King of Great Britain, and residents of 28 Albert road, Bolton, in the county of Lancaster, England, have invented a certain new and useful Improvement in Beds for Lathes and Grinding and like Machines, of which the following description, having reference to the accompanying sheets of drawings, is a specification.

This invention relates to the construction of beds for lathes and grinding and like machines so that the torsional strains or stresses that have to be withstood in said machines are more firmly resisted than by lathe beds as heretofore constructed, while the vertical or bending strains are also better resisted, and our said invention consists in forming the body of the lathe bed of a hollow cylindrical or tubular shape with vertical walls projecting therefrom to support the saddle and other parts that are mounted upon and have to be carried or supported by said lathe beds.

In order that our said invention may be readily understood, we have hereunto appended a sheet of drawings illustrative thereof, wherein—

Figure 1 is a sectional end elevation of a lathe bed or like supporting device constructed in accordance with our invention.

Fig. 2 is a side elevation, partly in section, of Fig. 1, and as seen in the direction indicated by the arrow 2.

In carrying our invention into effect we form the lathe bed principally of the tubular part *a* and upon this part *a* along its outer edges we form extending flanges *b* so that upon the upper edges of these flanges we may have the guiding or V surfaces *c* which are to receive the saddle or other parts that have to be mounted upon the bed of the lathe, grinding or like machine. We also extend the side walls so that the flanges *g* are formed preferably in alinement with the flanges *b* thus while the circular or cylindrical part *a* is of an appropriate shape for resisting torsional strains or stresses the flanges *b* and *g* will resist vertical weights or forces that may act upon said beds in this direction. In order to permit the turnings or portions cut away from the articles being acted upon in the lathe or other machine to escape, we form slots or openings *e* in the side flanges *b* so that a free passage is afforded for the falling away of the parts described, while in order to strengthen the flanges *b* or to compensate for the weakening of same by the cutting away of the parts to form the slots *e* we construct ribs or strengthening wings *d* which are formed integrally with the tubular part *a* and the flanges *b*.

Such being the nature and object of our said invention what we claim is:—

1. In beds for lathes and grinding and like machines, a tubular or cylindrical portion extending approximately the full length of the lathe bed and vertically disposed supporting flanges, also extending approximately the full length of the lathe bed.

2. In beds for lathes and grinding and like machines, the combination of a tubular or cylindrical portion, vertically disposed supporting flanges extending approximately the full length of said cylindrical portion, and other flanges extending from the cylindrical portion to form guiding surfaces for the lathe saddle or other part.

3. In beds for lathes and grinding and like machines, a tubular or cylindrical portion, vertically disposed flanges projecting therefrom and extending approximately the full length of the cylindrical portion, and openings formed in said flanges to permit the discharge of the turnings or cuttings.

4. In beds for lathes and grinding and like machines, the combination of a tubular or cylindrical part, vertically disposed flanges projecting therefrom and extending approximately the full length of said cylindrical part, and strengthening ribs extending between said flanges and said tubular part.

GEORGE WILLIAM McWILLIAM.
ALEXANDER McWILLIAM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."