

J. R. BLUMENBERG.
CORED QUAD.
APPLICATION FILED FEB. 10, 1909.

973,469.

Patented Oct. 25, 1910.

Fig. 1 Fig. 2

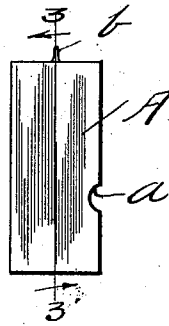
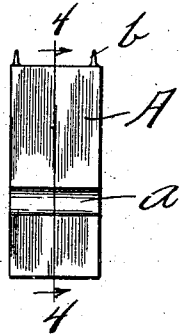


Fig. 3

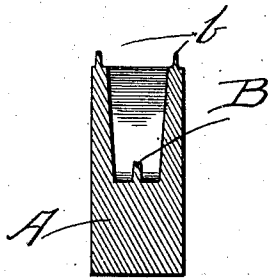


Fig. 4

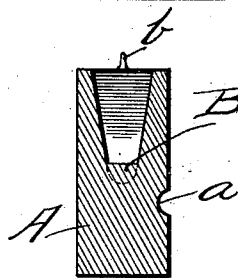
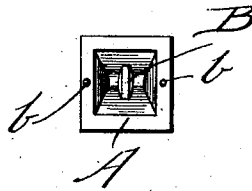


Fig. 5



Witnesses

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UNITED STATES PATENT OFFICE.

JULIUS R. BLUMENBERG, OF CHICAGO, ILLINOIS.

CORED QUAD.

973,469.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JULIUS R. BLUMENBERG, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cored Quads; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

In type setting the quad sometimes is found to work up slightly sufficiently after a few impressions have been made for the face of the quad to contact the paper thereby blackening the same. This arises from the fact that the quad, of course, having no printing faces, is unsupported against outward movement. Furthermore, in rectifying mistakes in setting, it is difficult to elevate the quad owing to the fact that the face thereof is below the rest of the type faces and it thus becomes necessary to loosen the type in the form for this purpose. Furthermore, the large quantity of metal consumed in casting the quad solid occasions considerable unnecessary expense for material.

The object of this invention is to so construct the quad as to insure the same maintaining its proper position or level in the form, in other words, to prevent the same from working outwardly to a sufficient extent to make an impression.

It is also an object of the invention to afford in connection with a cored quad one or more projections on the face thereof and the points of which extend flush with the type faces and which thus, with each impression, tend to resist any outward displacement of the quad, the points of said projection being so small as not to visibly mark the paper.

Finally it is an object of the invention to afford within a cored quad a projection adapted to be engaged by the type setter's pliers to permit the quad to be lifted or removed without the necessity of releasing the form, as heretofore.

The invention consists in the matters hereinafter described and more fully pointed out and defined in the appended claims.

In the drawings: Figure 1 is a view in elevation of the grooved side of the quad. Fig. 2 is a similar view taken at a right angle with that shown in Fig. 1. Fig. 3 is a section taken on line 3—3 of Fig. 2. Fig. 4 is a section taken on line 4—4 of Fig. 1. Fig. 5 is a top plan view of the quad.

As shown in the drawings: A, indicates the quad constructed of the usual or any desired material and provided with a groove *a*, in the side thereof, as usual, to facilitate setting. Said quad is cast hollow or cored, as shown in Figs. 3, 4, and 5, and extending transversely thereof at the bottom of the core is an upstanding integral rib B, adapted to be engaged by the pliers of the type setter to permit the quad to be lifted or otherwise manipulated.

Integrally secured on the face end of the quad are projections *b*, which taper upwardly to correspond nearly with the height of the type faces and, as shown, are of small size at the point as to prevent the same making any appreciable mark or impression upon the paper when printing, but serve with each impression taken to hold the quad from outward displacement or movement.

The operation is obvious from the construction described. Of course, the quad may be made of any desired size or material, and if desired, the rib or projection B, may be otherwise placed within the core to permit of engagement with pliers or any suitable tool to permit the quad to be lifted and adjusted.

Obviously various details of the construction may be made. I therefore do not purpose limiting this application for patent otherwise than necessitated by the prior art.

I claim as my invention:

1. The combination with a cored quad of an interior projection adapted to be engaged in handling the quad, and integral finely tapered projections on the face of the quad terminating below type height.

2. A quad having its face cored inwardly, an integral projection in the core, and integral projections on the face of the quad, the last named projections terminating nearly flush with the type faces when the quad is set.

3. A quad having minute longitudinal

projections on one end to prevent the face of the quad from ever being flush with the type.

4. A quad cored longitudinally, an interior projection in the core, a plurality of
5 projections on one end of the quad tapered to a point and said quad provided with a transverse groove.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

JULIUS R. BLUMENBERG.

Witnesses:

C. W. HIRES,
F. F. NORTON.