

(No Model.)

J. C. GITHENS.
ROCK DRILL CARRIAGE.

No. 359,720.

Patented Mar. 22, 1887.

Fig. 1.

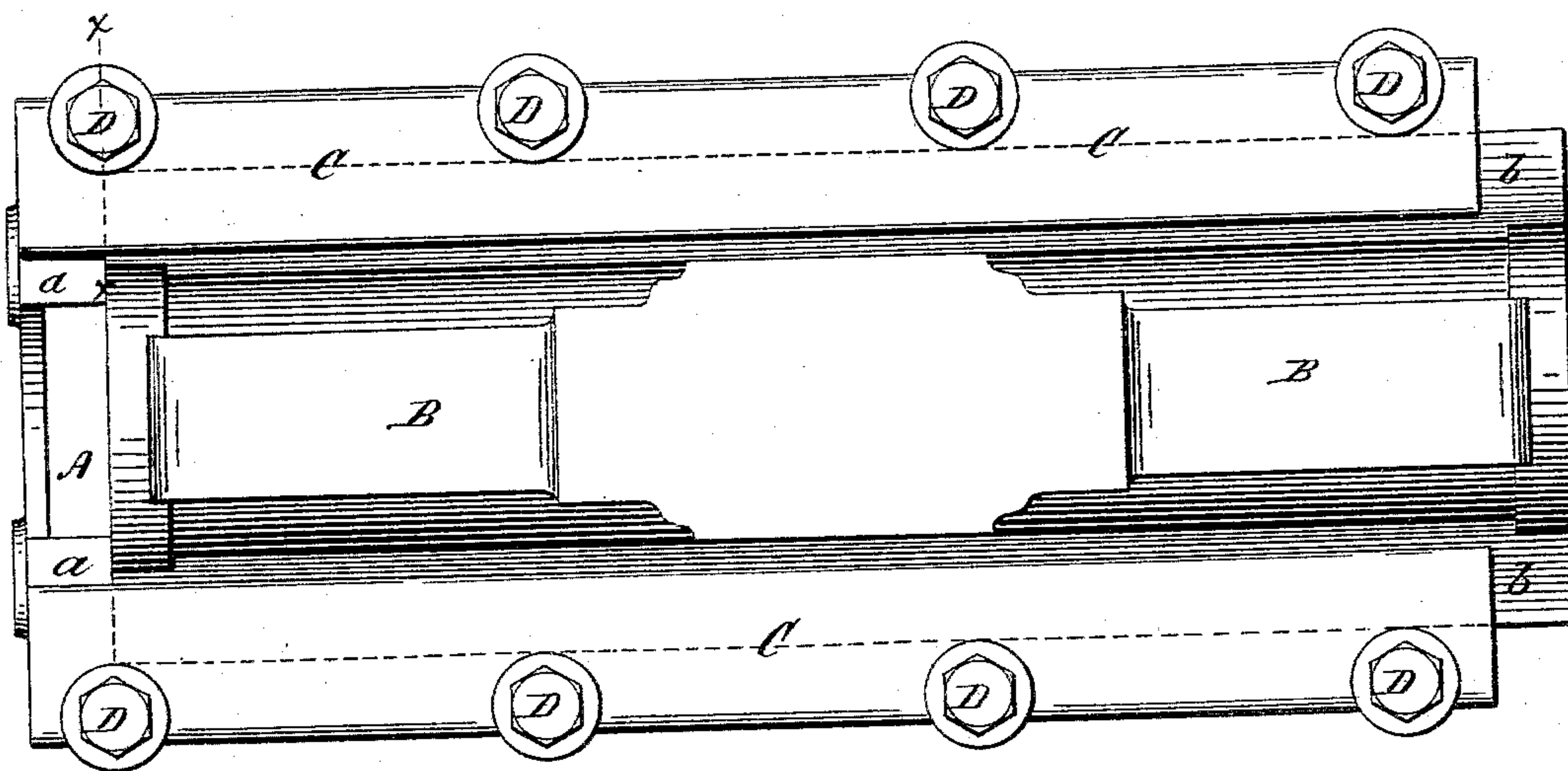
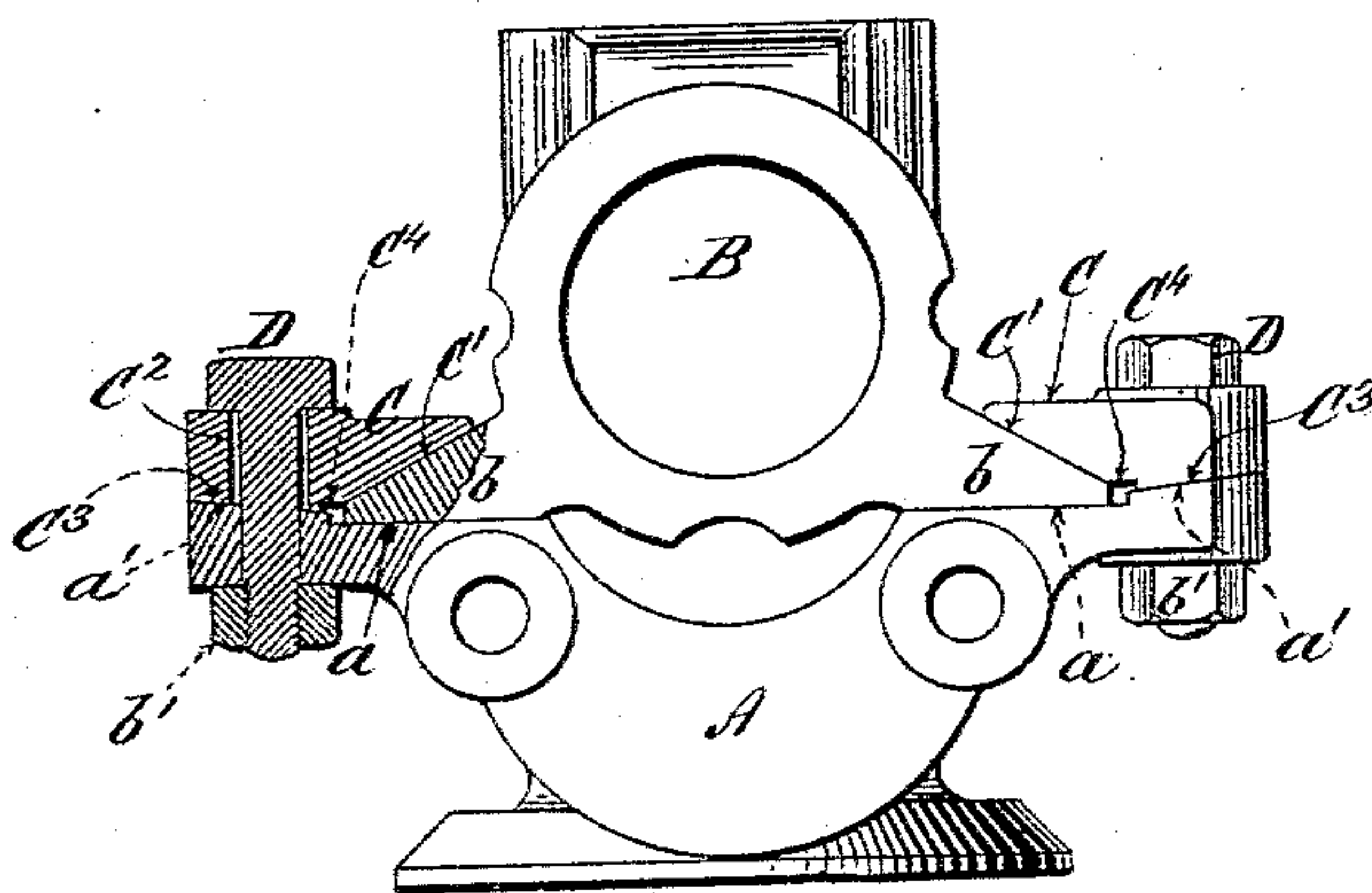


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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ROCK-DRILL CARRIAGE.

SPECIFICATION forming part of Letters Patent No. 359,720, dated March 22, 1887.

Application filed January 11, 1887. Serial No. 324,023. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH C. GITHENS, of North Tarrytown, New York, have invented a certain Improvement in Rock-Drill Carriages, of which the following is a specification.

This improvement relates to the construction of the carriages in which rock-drill cylinders are supported, and in which the cylinder slides during the longitudinal feeding movements which are imparted to it. In these carriages as heretofore constructed bearings parallel with the face of the carriage have been provided for the caps, which are bolted to the sides of the carriage, and which lap over upon the inclined front sides of the flanges projecting laterally from the rear side of the carriage. To provide for the necessary adjustment of these caps as the parts become worn by use, the bolt-holes through the caps are slotted in a direction perpendicular to the axis of the cylinder. This permits the caps to slip outwardly if the bolts become loose.

The present invention consists in providing inwardly and downwardly inclined bearings for these caps, so that any outward thrust exerted upon the caps causes them to bind between their bearings and the head or nuts on the bolts by which they are secured to the carriage.

The accompanying drawings, representing a rock-drill cylinder and a carriage embodying the invention, are as follows:

Figure 1 is a top plan view. Fig. 2 is an end elevation, partly in section.

The drawings represent an ordinary rock-drill carriage, A, and a rock-drill cylinder, B, provided upon its rear side with the usual laterally-projecting chamfered flanges, *b b*. The face of the carriage is longitudinally grooved in the middle, and presents the usual two side bearings, *a a*, for the parallel faces of the flanges *b b*, respectively.

The caps C are fastened to the sides of the carriage by the usual transverse bolts, D D D,

&c. The inward projections of the caps C have the greater portions of their under surfaces, C', inclined in the usual way, to correspond with the inclination of the inclined sides of the flanges *b b*, upon which they bear respectively.

The caps C are provided with the transversely-slotted bolt-holes C'. The bearings *a'* for the caps are each inwardly inclined toward the middle of the carriage, and the outer portions, C', of the inner faces of the caps are correspondingly inclined.

It will be seen that the greater portion of the under surface of each cap is formed in two planes, which are at obtuse angles to each other. To permit its inward movement when occasion arises for adjustment in consequence of wear, each cap is provided with the longitudinal notch C', the edges of which meet, respectively, the edges of the inclined faces C' and C' of the cap.

It will be seen that the portions of the caps which are confined between their bearings *a'* and the heads of the bolts are wedge-shaped in cross-section, and their thicker portions are toward the middle of the carriage, and hence that any outward thrust upon the caps will tend to make them bind between their bearings and the heads of the bolts, or between their bearings and the nuts *b'* of the bolts, if the bolts should be transposed from the positions in which they are shown in the drawings and the nuts should be employed upon the front side of the carriage instead of upon the rear side, as they are represented.

What is claimed as the invention is—

The combination, in a rock-drill carriage, of the inwardly-inclined bearings *a'*, the caps C, each provided with the correspondingly-inclined bearing C', and the transverse bolts D D D, &c., as and for the purpose set forth.

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Witnesses:

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