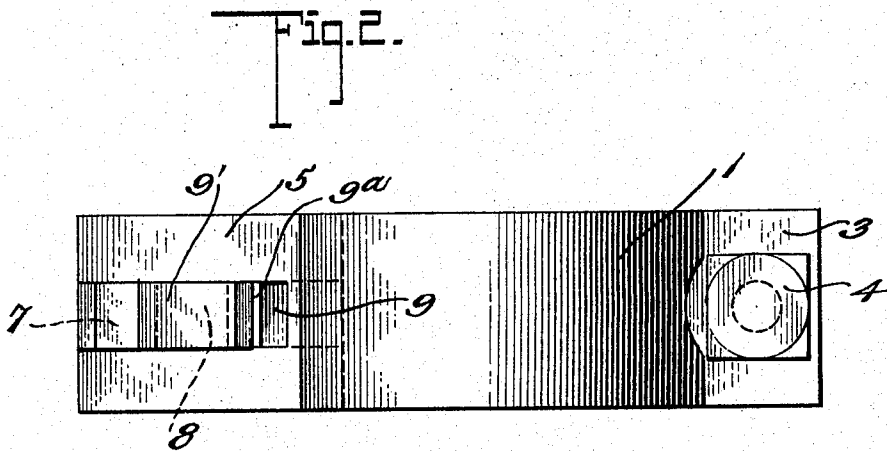
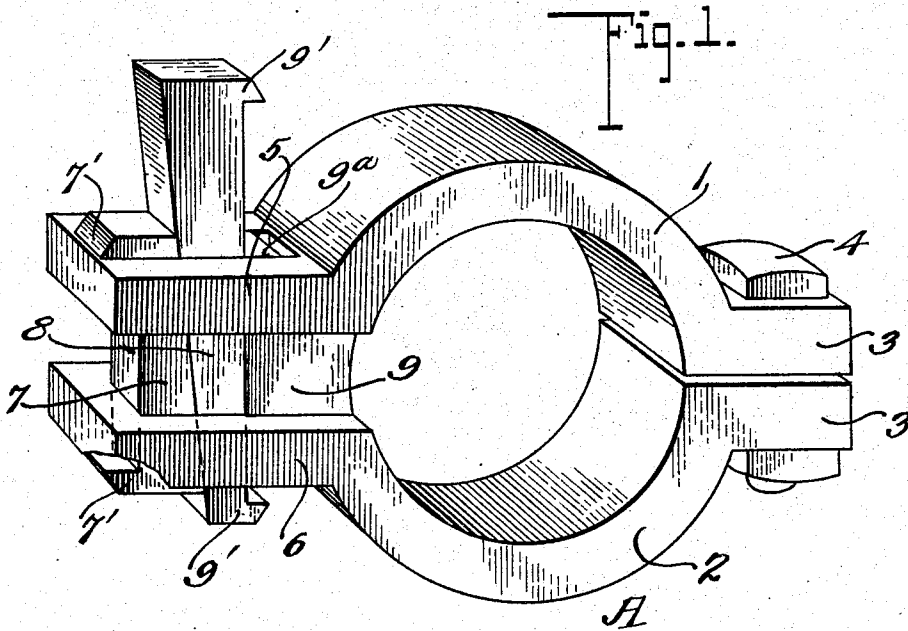


O. E. RADTKE.
COLLAR CLAMP.
APPLICATION FILED JUNE 9, 1915.

1,183,767.

Patented May 16, 1916.



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OTTO E. RADTKE, OF AURORA, NEVADA.

COLLAR-CLAMP.

Specification of Letters Patent.

Patented May 16, 1916.

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To all whom it may concern:

Be it known that I, OTTO E. RADTKE, a citizen of the United States, residing at Aurora, in the county of Mineral and State of Nevada, have invented certain new and useful Improvements in Collar-Clamps, of which the following is a specification.

The purpose of this invention has been to devise a simple, effective, and easily operable supporting collar clamp for drilling machines.

In its preferred embodiment the clamp hereinafter more fully described in detail is comprised of sections adapted to embrace or receive the column of the mining drill, suitable fastening means being employed at the opposite ends of said sections, whereby to effectively hold the clamp at a predetermined adjustment longitudinally of the drill column. The fastening means include gib and key devices so mounted upon the sections of the clamping collar that the latter may be quickly loosened and rigidly positioned by clamping action in respect to said column.

An especial object in view in the detail construction of the invention has been to so assemble and construct the fastening devices that accidental liability of displacement of the latter is entirely obviated.

With the above and other objects in view, this invention consists in the construction, combination and arrangement of parts all as hereinafter fully described, claimed and illustrated in the accompanying drawing, wherein:

Figure 1 is a perspective view of a supporting clamping collar embodying the essential features of the invention. Fig. 2 is a side elevation.

Throughout the following detail description, and on the several figures of the drawing, similar parts are referred to by like reference characters.

Referring to the drawing, and specifically describing the construction illustrated, A denotes the body of the clamping collar, the same consisting of opposing similarly formed sections 1 and 2. Sections 1 and 2 are provided at one end with short offstanding apertured lugs 3 through which passes a bolt or similar fastening 5 located at one side of the device. At the opposite side of the body A of the device, the sections 1 and 2 are formed with relatively long offstanding arms 5 and 6. The arms 5

and 6 are provided with corresponding slots, the outer portions of which receive the gib 7 and key 8, the innermost portions of which receive the head portion 9^a of a slidable clamping dog 9.

The dog 9 might be said to be of T-shaped formation, the head of the dog being received in the slots of the arms 5 and 6 as above described, and the central portion of the dog being disposed intermediate the sections 1 and 2 of the device and having its innermost surface curved to conform with the circumferential curvature of the drill column and to, of course, also conform with the curvature of the inner walls of the sections 1 and 2 which are designed to snugly embrace said column. At its opposite ends, the gib 7 has an outwardly projecting extension 7' and in like manner at its opposite ends the key 8 has inwardly projecting extension 9', both the key and the gib being of tapered formation to obtain the usual wedging coöperation obtained in devices of this sort as commonly employed in the art.

Owing to the provision of the projections 7' and 9' on the gib 7 and key 8 respectively and the disposition of the dog 9 such that the head portion is received by the slots of the arms 5 and 6, it will be evident that the accidental displacement of the members 7 and 8 as well as the member 9 is prevented it being impracticable to remove these members from the clamping collar while the parts are connected together in the manner shown in the drawings. Any tendency for the key 8 to be displaced longitudinally is prevented by engagement of the projections 9' with the head portion 9^a of the dog 9. It is contemplated that in the event it should be desired to remove the clamp from the column, and the same expedient is resorted to when the device is applied to the drill column initially, that the fastening 4 must be removed to enable spreading of the sections 1 and 2 sufficiently that the dog 9 may be slipped inwardly whereupon its head will be displaced from the slots of the arms 5 and 6, and special play room allowed for the longitudinal displacement of the key 8.

The construction of the clamping collar, as above set forth, is such that the action of the device is very simple, the operator only being required to strike the key 8 a light blow in either direction to loosen the collar on the drill column or effectively tighten the same in rigid engagement with said column

through the frictional engagement of the parts 1 and 2 and 9. There is no liability whatever of the clamping collar becoming accidentally detached from the column for the reasons hereinbefore presented.

5 Having thus described my invention, what I claim as new is:

1. A clamping collar for mine drilling machines comprising opposing sections 10 formed at one end with offstanding lugs, and at the opposite ends with offstanding arms, a fastening connecting said lugs together, the arms being formed with slots 15 lengthwise thereof, a gib and key extending through the slots of said arms and oppositely tapered for wedging cooperation, the gib being provided with offstanding projections to engage with the said arms to prevent displacement of the gib, and a clamping dog 20 disposed intermediate said arms and formed with a portion coincident with the inner surfaces of the clamp sections, said dog also being formed with a head projecting and operating in the slots of the offstanding arms 25 of said sections.

2. A clamping collar for mine drill col-

umns comprising opposing sections of like formation, each section being curved intermediate its ends to fit against a drill column, having at one end an offstanding apertured 30 lug and at the other end an offstanding slotted arm, a fastening passing through the apertured lugs of the sections to secure the same permanently together, a gib and key 35 passing through the slots of the offstanding arms of the sections and of tapered formation for cooperative wedging action one against the other, the gib having projections at its ends engageable with the outer sides 40 of the arms to prevent displacement of the gib, a clamping dog arranged between said arms and having its inner end coincident with the inner surface of the sections and provided at its outer end with a head operating 45 in the slots of said arms, and engageable by the said key, the key being formed with the projections arranged at its ends and opposite to the head of the said dog and cooperative therewith to prevent unauthorized displacement of the key. 50

In testimony whereof I affix my signature:
OTTO E. RADTKE.

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