(No Model.)

T. A. WASHBURN.

ADJUSTING COLLAR FOR PAN DRIVERS.

No. 420,752. Patented Feb. 4, 1890.

Fig. 1

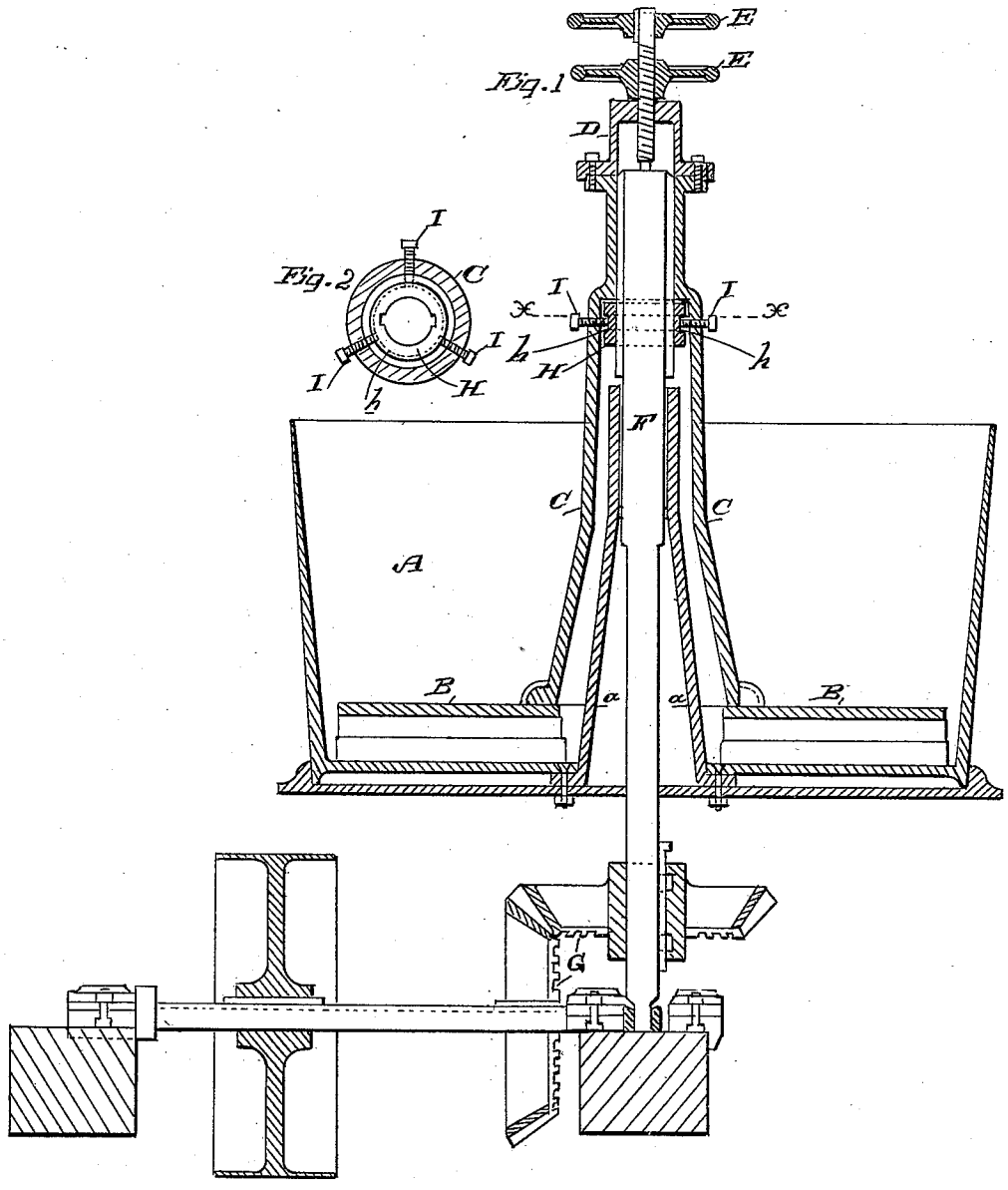


Fig. 2

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UNITED STATES PATENT OFFICE.

THEODORE A. WASHBURN, OF GOLD HILL, NEVADA.

ADJUSTING-COLLAR FOR PAN-DRIVERS.

SPECIFICATION forming part of Letters Patent No. 420,752, dated February 4, 1890.

Application filed October 18, 1889. Serial No. 327,437. (No model.)

To all whom it may concern:

Be it known that I, THEODORE A. WASHBURN, a citizen of the United States, residing at Gold Hill, Story county, State of Nevada, have invented an Improvement in Adjusting-Collars for Pan-Drivers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the general class of mining machinery, and especially to that sub-class in which a pan is employed and in which a muller is rotated by a driver mounted on a central power-shaft, said sub-class including pan-amalgamators, settlers, crushers, pulverizers, &c.

My invention consists in the novel collar encircling the shaft and carried by the driver, as will hereinafter be fully described, and specifically pointed out in the claim.

The object of the invention will be made clear in the course of the specification.

Referring to the accompanying drawings for a more complete explantion of my invention, Figure 1 is a vertical section of a pan or settler, showing the application of my adjusting-collar. Fig. 2 is a cross-section on line X X of Fig. 1.

A is the pan with cone-center *a*, B the muller, C the driver, D the driver-cap, E the adjusting-screws, F the driver-shaft feathered in the driver, and G the power gearing and shafting below, all of these parts being those of the usual pan or settler.

H is my collar, consisting of a metal ring having a groove *h* in its periphery. The collar is featherwayed on the shaft F, so that it will slide up and down on the shaft as the shoes and dies wear. The collar lies within the driver C, and through said driver pass three set-screws I into the peripheral groove of the collar, so that said collar will move up and down with the driver. The object of this collar is to prevent the driver and muller from swinging out of their regular course. New drivers often swing from the very first, even though they are bored to fit closely to the shaft. They get worse by use until the shoes of the muller will be worn out on one side, while those on the opposite side will not be more than half worn. When a pan is thus faulty, it will not do good work, and there is also a great waste of iron; but by the use of my adjusting-collar the driver is held true to the shaft and will not swing out of its course. The collar, being a separate piece, can be readily renewed when necessary.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the drive-shaft, the muller-driver featherwayed on said shaft, the separate collar within the muller-driver and featherwayed on the drive-shaft, and the set-screws passing through the muller-driver and engaging the collar, whereby driver and collar move up and down together, substantially as herein described.

In witness whereof I have hereunto set my hand.

THEODORE A. WASHBURN.

Witnesses:
P. KEWIN,
R. E. LEONARD.