

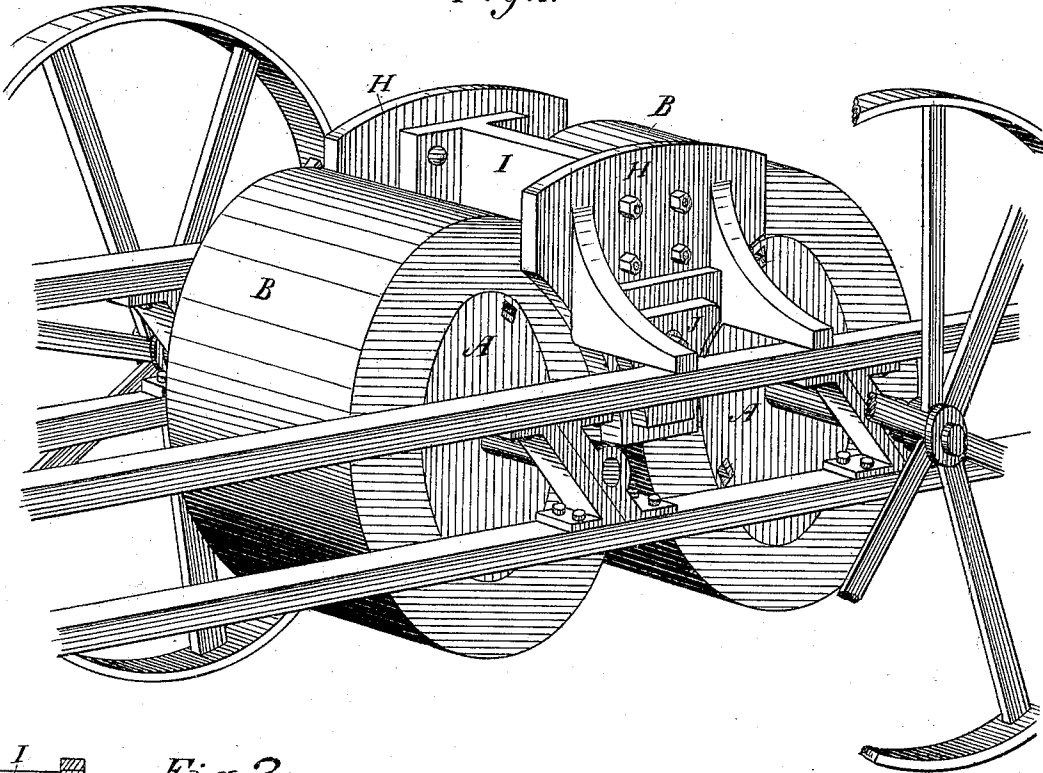
(No Model.)

W. E. WILD.  
ORE CRUSHING MACHINE.

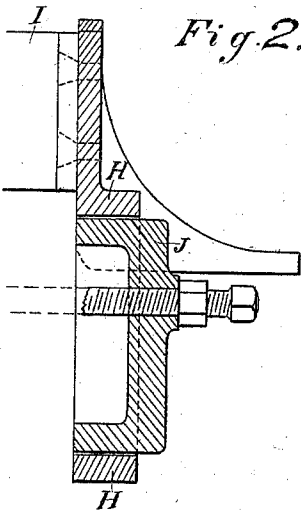
No. 331,017.

Patented Nov. 24, 1885.

*Fig. 1.*



*Fig. 2.*



Witnesses,  
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# UNITED STATES PATENT OFFICE.

WILLIAM E. WILD, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO GEORGE E. AMES, OF SAME PLACE.

## ORE-CRUSHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 331,017, dated November 24, 1885.

Application filed July 9, 1885. Serial No. 171,129. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM E. WILD, of the city and county of San Francisco, State of California, have invented an Improvement in Ore-Crushing Machines; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in ore-crushing machines; and it consists in a means for feeding ore to the cylinders and preventing waste.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view showing the rolls and the feeding device. Fig. 2 is a vertical section through one side of the hopper.

In the former patent issued to me April 14, 1885, I have shown a machine for crushing ore, consisting of cylinders or rolls which rotate toward each other, and various connected mechanism.

In my present invention, A A are the cylinders or rolls, which may be made of cast-iron and secured to shafts, with gears or pulleys attached, so that they may be properly rotated. Around the outside of these rolls are fitted cylindrical shells of steel, which serve as shoes to crush the ore passing between them, their faces rotating as nearly together as may be required for the purpose. In order to feed the material to be crushed to these cylinders, I employ a hopper which is composed of two ends, H H, properly supported from the framework of the machine, so as to stand vertically at the ends of the cylinders and extend down with their concave lower edges approaching the curves of the exteriors of the cylinders where they run together, as shown in Fig. 1. These two ends are held together by a strong transverse bar or brace, I, which extends be-

tween them and above the point where the rollers approach each other.

In order to prevent the material escaping between the ends of the rollers and the ends H of the hopper, I fit adjustable plates J in openings which are formed in the lower parts of said ends H, and these plates may be moved inward, so as to fit closely against the moving ends of the rolls near their peripheries. These plates J are shaped, as shown, with the edges which fit against the rolls made concave, or with curves having the same radius as that of the rolls. These plates are cored out in the center, so that only the outer edges approach the ends of the rolls, and this reduces the amount of wear of the surface to a minimum. These plates are set up from time to time, so as to stand as near the ends of the rolls as is suitable, to prevent the material which is to be crushed from sifting out and escaping at the ends.

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

In an ore-crushing machine, the vertical fixed ends H, supported from the frame of the machine, upon each side of the rolls and above their meeting point, and the transverse brace or support, in combination with the adjustable plates J, and adjusting-screws, whereby they may be held so as to prevent the escape of the material at the ends of the rolls, substantially as herein described.

In witness whereof I have hereunto set my hand.

WILLIAM E. WILD.

Witnesses:

S. H. NOURSE,  
H. B. APPLEWHATTE.