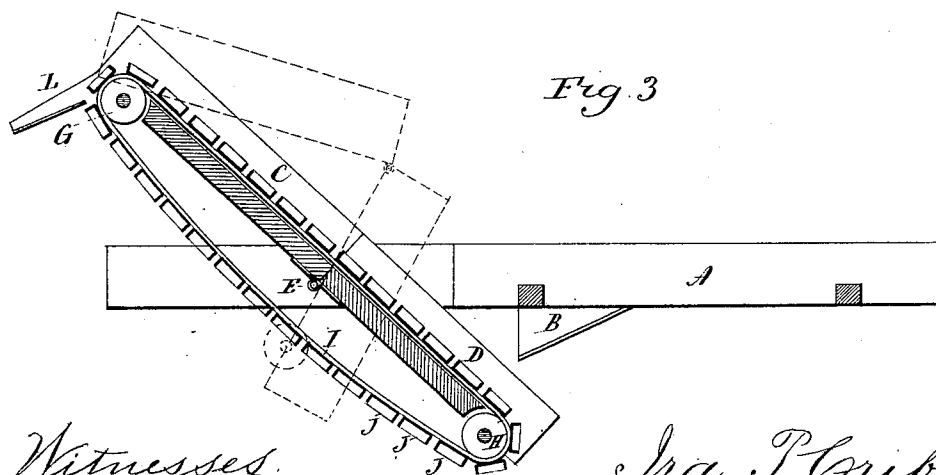
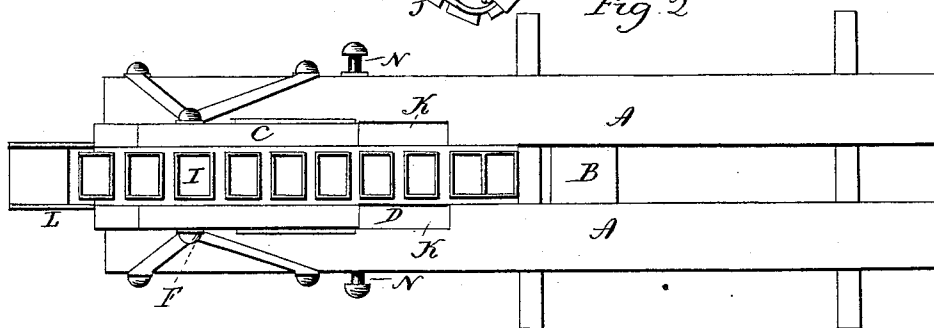
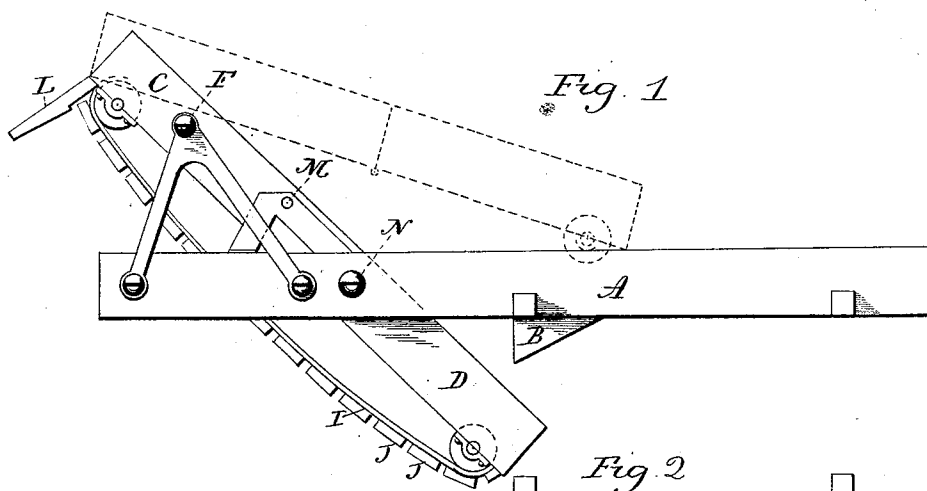


(No Model.)

I. P. CRIBB.
ELEVATOR FOR STONE CRUSHERS.

No. 480,490.

Patented Aug. 9, 1892.



Witnesses.
J. H. Shumway.
Lillian D. Kellogg.

Ira P. Cribb.
Inventor.
G. W. Earle & Son.

UNITED STATES PATENT OFFICE.

IRA P. CRIBB, OF CANANDAIGUA, NEW YORK, ASSIGNOR TO THE ROBINSON REA MANUFACTURING COMPANY, OF PITTSBURG, PENNSYLVANIA, AND THEODORE A. BLAKE, OF NEW HAVEN, CONNECTICUT.

ELEVATOR FOR STONE-CRUSHERS.

SPECIFICATION forming part of Letters Patent No. 480,490, dated August 9, 1892.

Application filed November 9, 1891. Serial No. 411,346. (No model.)

To all whom it may concern:

Be it known that I, IRA P. CRIBB, of Canandaigua, in the county of Ontario and State of New York, have invented a new Improvement in Elevators for Stone-Crushers; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the bed and elevator; Fig. 2, a plan view of the same, and Fig. 3 a longitudinal central section of the same.

This invention relates to an improvement in the construction of elevators for that class of stone-crushers which are adapted to be transported from place to place, as occasion may require, for breaking stone. It is necessary that the elevator should be so arranged as to extend below the discharge-chute from the crusher and rise to a point considerably above, so that the stone delivered from the crusher may be carried to a higher point of elevation for discharge. In such construction of crushers it has been required to remove the elevator from the machine before transportation was attempted, for the reason that the extension of the elevator below the crusher was so great as to interfere with its movement. Again, it frequently occurs in the running of the crusher that it is desirable to displace the elevator from its receiving-point for the purpose of access below the machine or for a delivery below without the use of the elevator. In such case the removal of the elevator has been necessary.

The object of my invention is to construct the elevator so that it may be contracted or thrown up from below the crusher without detachment from the apparatus; and it consists in the construction as hereinafter described, and particularly recited in the claim.

A represents the bed upon which the crusher rests. This bed is composed of two heavy wood sills adapted to support the crusher. The crusher is not shown, as such crushers are well known, the machine preferred being that known as the "Blake crusher." The crushed

stone is delivered between the sills onto a chute B, inclined downward, as usual. The elevator is composed of a frame made in two sections C and D, the two sections being hinged together upon the under side, as at E. The section C is hung upon an axis F above the bed, and in the part C the upper drum G is arranged upon an arbor, so as to revolve freely, and to which power may be applied, as usual in such elevators. The part D of the frame carries near its lower end a like drum H, and around the two drums the endless band I is arranged, carrying buckets J, as usual. The width of the elevator-frame is such as to permit it to pass down between the sills of the bed, the sills being cut away upon their inner sides, as represented at K K, Fig. 2, for such free passage of the frame. The lower end of the elevator is in such a position with relation to the chute B that the stone which falls upon the chute B may drop upon the upper run of the elevator, and so that as the band travels around the drums it will carry the stone or crushed material upward until it reaches the upper end, where it will be dumped onto a chute L. It will be observed that the elevator necessarily extends to a considerable distance below the bed when in practical use.

When it is desired to transport the crusher with the elevator or for any purpose to raise the elevator, the parts C D being free, the part C is drawn upward, the part D being turned under and so as to be lifted up through between the sides of the bed, as represented in broken lines, Fig. 3, until the lower part D is raised above the bed. Then the parts C D are returned into their straight position and so as to rest on the top of the bed, as seen in broken lines, Fig. 1. When in the down position, the parts are secured by suitable bolts M into the parts C and similar bolts N into the part D, which bolts are withdrawn when the elevator is to be contracted and raised. This doubling or bending of the elevator-frame to bring it up through its space between the sides of the bed does not displace or in any way interfere with the elevator-band. By this simple arrangement the crusher, with its bed and elevator, may be readily trans-

ferred from place to place without any material disarrangement or detachment of the parts, and at any time when it is desired to raise the elevator for any purpose it may be easily done as described.

5 I do not claim, broadly, an elevator made in two or more parts hinged together so as to be contracted, as such, I am aware, broadly considered, is not new.

10 I claim—

The combination of the sills or bed A A, adapted to receive a stone-crusher, a chute B between said sills, through which the crusher may discharge, an elevator-frame composed
15 of two parts C D, the one part C hung upon an axis above the said sills or bed and distant from the chute, the said part C also car-

rying a drum G at its upper end, the part D hinged to the lower end of the part C and carrying a drum H at its lower end, the said 20 frame adapted to fold up and down between the said sills, and an endless band through said frame and around the said drums, the said band carrying buckets, and the frame in its down position presenting the buckets to 25 the chute, substantially as and for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

IRA P. CRIBB.

Witnesses:

FRED G. DOUGLASS,
AUSTIN C. HUNTLY.