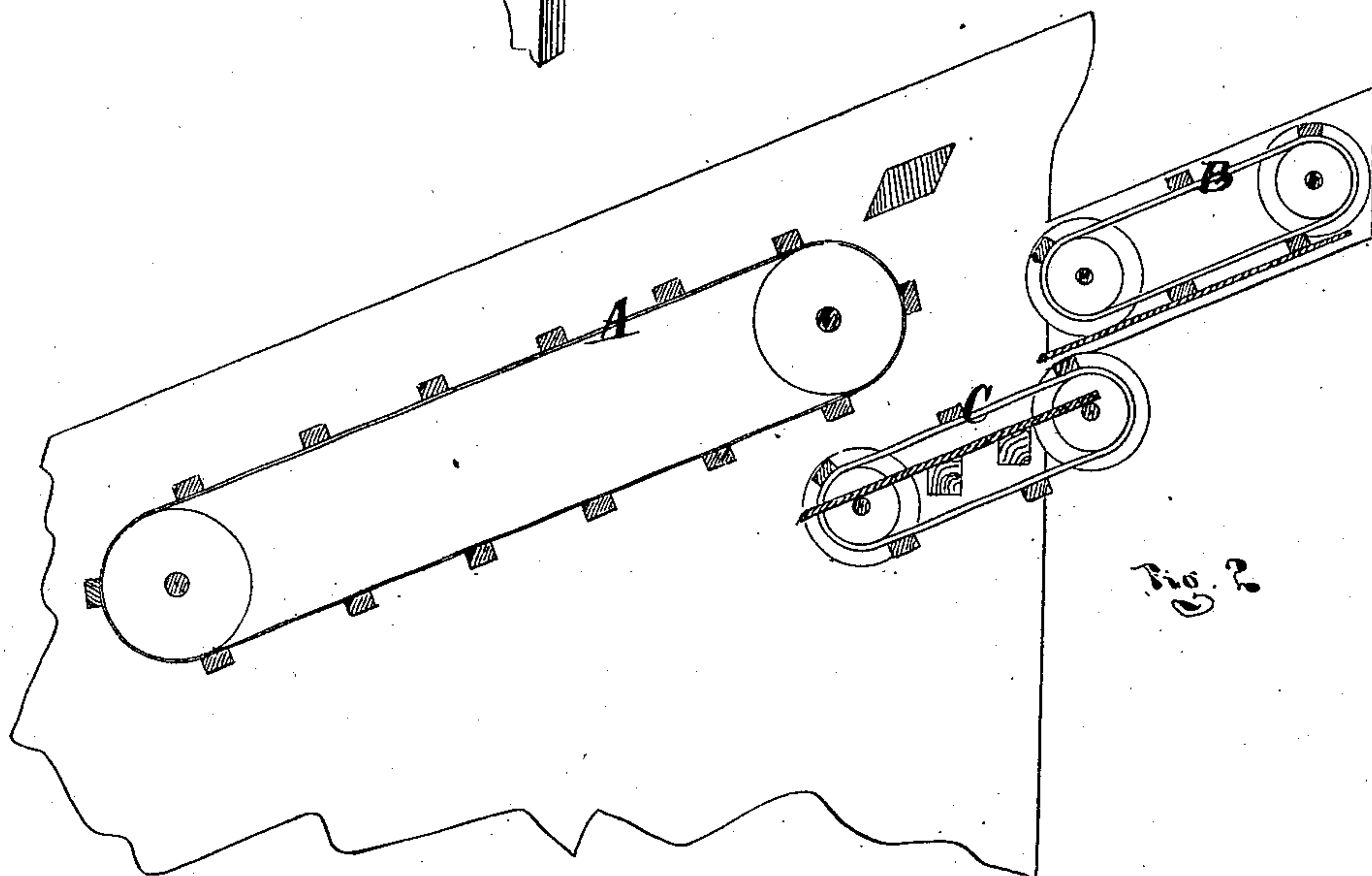
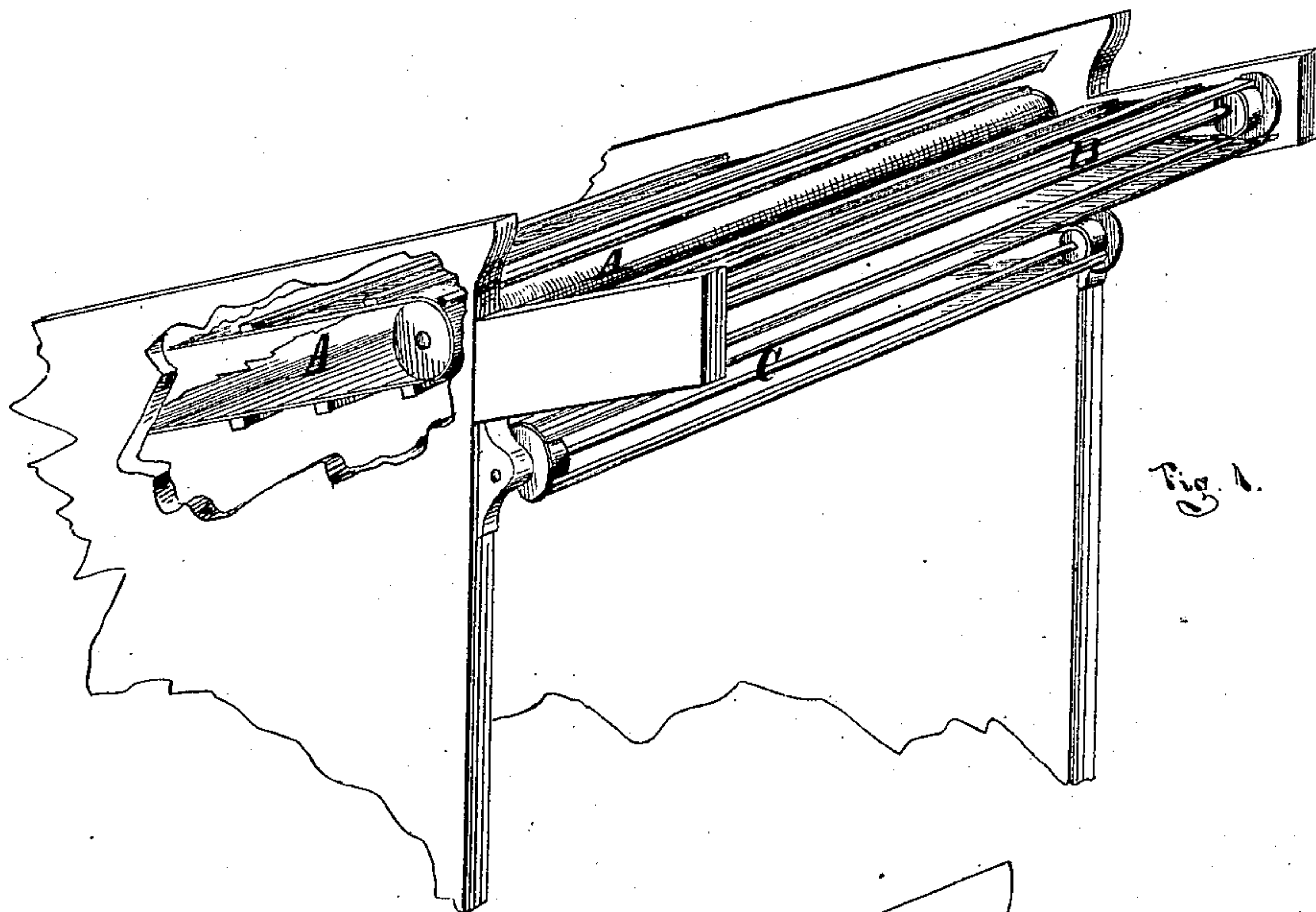


H. RAYMOND.  
Thrashing Machine.

No. 109,839.

Patented Dec. 6, 1870.



ATTEST

*A. F. Dunlop*  
*M. Stewart*

INVENTOR.

*H. Raymond*  
*per Atty*  
*Thos. S. Sprague*

# United States Patent Office.

HIRAM RAYMOND, OF TECUMSEH, MICHIGAN.

Letters Patent No. 109,839, dated December 6, 1870.

## IMPROVEMENT IN GRAIN-SEPARATORS.

The Schedule referred to in these Letters Patent and making part of the same.

### *To whom it may concern:*

Be it known that I, HIRAM RAYMOND, of Tecumseh, in the county of Lenawee and State of Michigan, have invented a new and useful Improvement in Grain-Separators; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective of a section of a separator, showing the position of my improvement. One side of the case is partially broken out.

Figure 2 is a vertical section of the same.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improvement in the construction of grain-separators, by means of which the trouble caused by machines clogging where the grain-belt empties on the floor, at the lower end of the upper raddle, causing more or less grain to be carried over, and throwing too great a quantity on the sieves at the same time, is obviated.

The invention consists in a lower raddle, placed below the upper raddle and grain-belt, and at a point below the intervening space between the ends of said upper raddle and grain-belt.

In the accompanying drawing—

A represents the grain-belt of a separator; B, the upper raddle; and C, the lower raddle, which constitutes my improvement, the use of which will prevent the necessity of employing a man with a stick to keep the sieves clear, and obviate the waiting of the feeder for the sieves to clear themselves.

What I claim as my invention, and desire to secure by Letters Patent, is—

The raddle C, in combination with the raddle B, when constructed, arranged, and operated substantially as described and shown for the purposes set forth.

HIRAM RAYMOND.

Witnesses:

CHARLES BURRIDGE,  
EDWIN B. WOOD.