

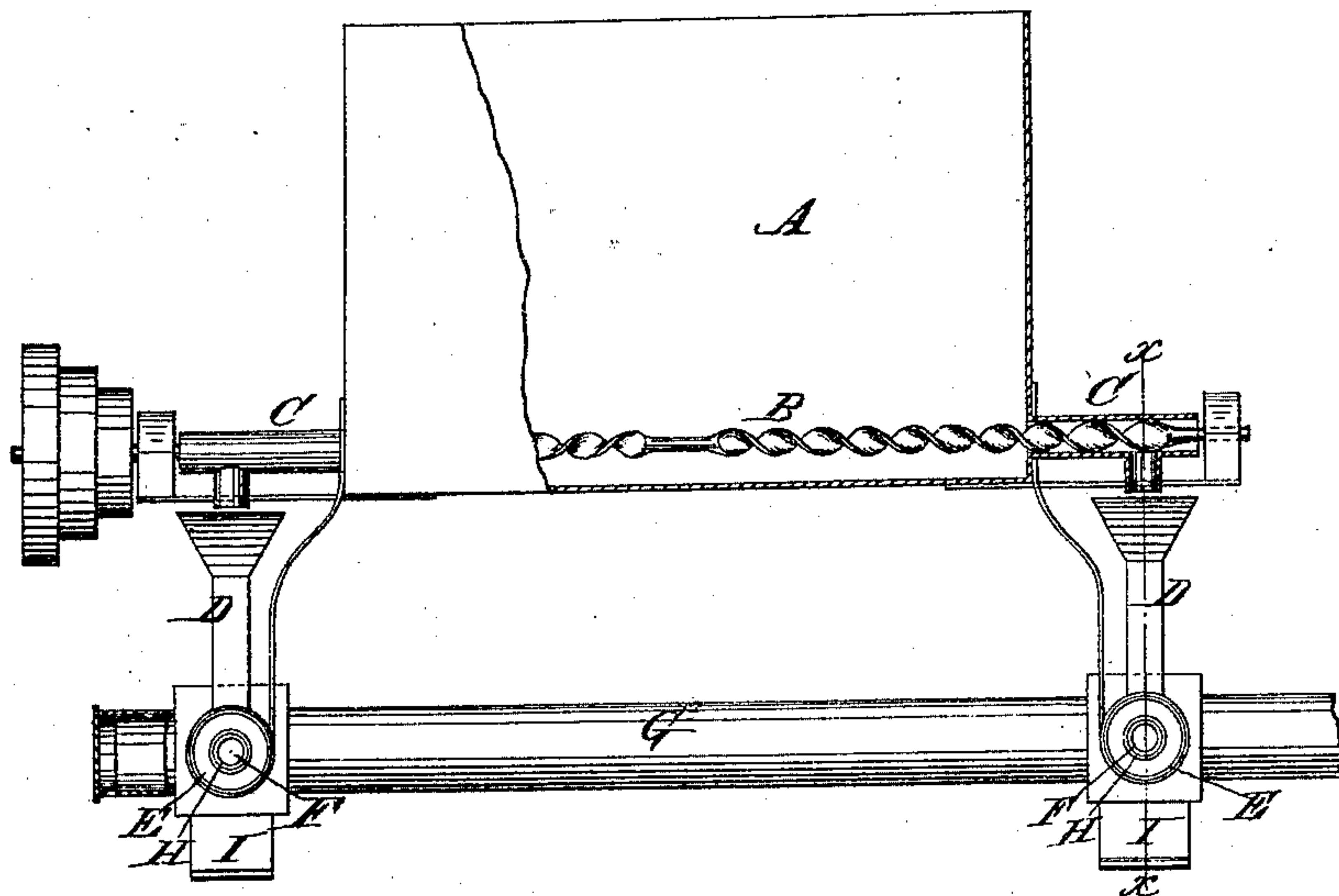
W. WEST.

PULVERIZED FUEL-FEEDER FOR SMELTING FURNACES.

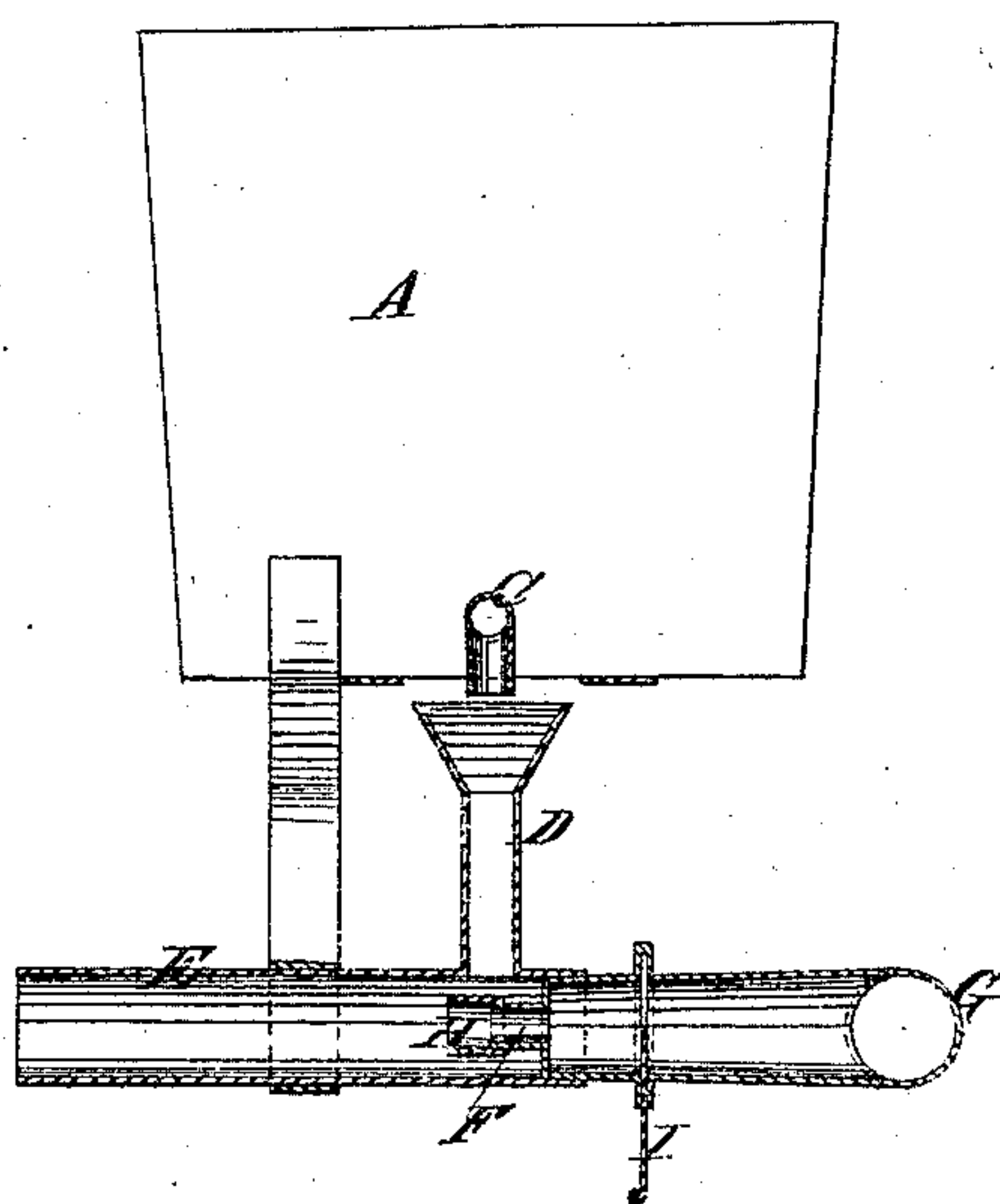
No. 184,122.

Patented Nov. 7, 1876.

*Fig. 1.*



*Fig. 2.*



**WITNESSES:**

Yb. Hydquist.  
John Goethals

**INVENTOR:**

INVENTOR  
H. Orest

BY

**ATTORNEYS.**

# UNITED STATES PATENT OFFICE.

WILLIAM WEST, OF GOLDEN CITY, ASSIGNOR OF ONE-HALF HIS RIGHT TO  
IRA S. ELKINS, OF DENVER, COLORADO TERRITORY.

## IMPROVEMENT IN PULVERIZED FUEL FEEDER FOR SMELTING-FURNACES.

Specification forming part of Letters Patent No. 184,122, dated November 7, 1876; application filed  
July 1, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM WEST, of Golden City, in the county of Jefferson and Territory of Colorado, have invented a new and Improved Pulverized Fuel Feeder for Smelting-Furnaces, of which the following is a specification:

My invention consists of a contrivance for feeding smelting-furnaces with coal-dust by means of the air-blast.

Figure 1 is partly a side elevation and partly a sectional elevation of my improved coal-dust feeder, and Fig. 2 is a section on the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is a hopper, in which the dust is placed, for being fed into the furnace. B is a screw-conveyer for feeding out the dust into one or more tubes, C, from which it drops through the funnel-mouthed pipes D into the large blast-pipes E upon the nozzles F, through which the blasts enter E from the main pipe

G, to be carried along by the air into the furnace. H represents a movable piece of pipe to regulate the mixing of the air and coal, and I is a damper or valve to regulate the air.

The screw will have a cone-pulley for the driving-belt, or other means for varying the speed at the will of the operator. Other means of giving a regular supply of coal-dust to the pipe D may be employed.

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

The combination of hopper-box A, right-and-left screw-conveyer B inclosed in tube C, funnel-mouthed tube D, pipe E, and blast-pipe G, the latter having the adjustable nozzle H, substantially as described.

WILLIAM WEST.

Witnesses:

SILAS BERTENSHAM,  
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