

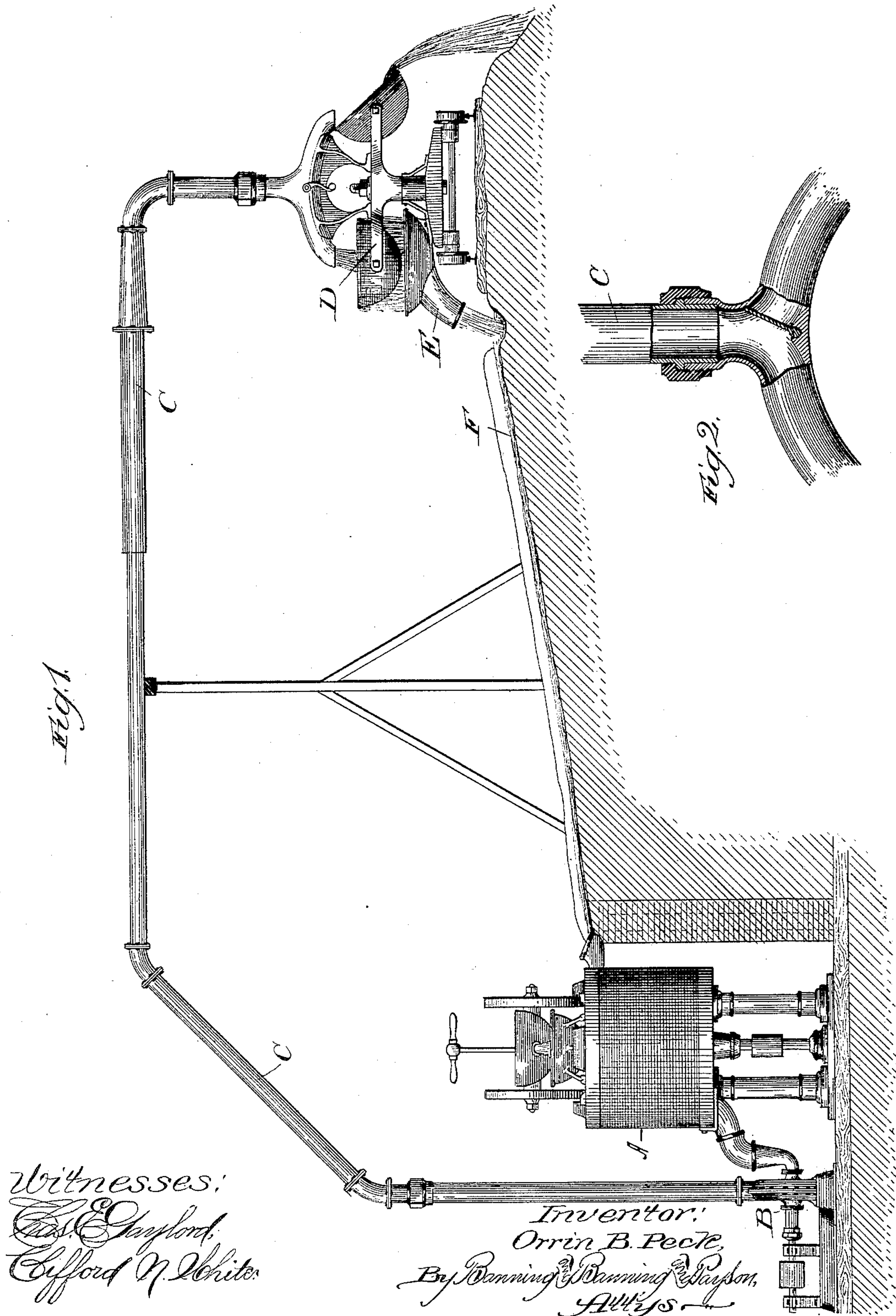
(No Model.)

O. B. PECK.

CENTRIFUGAL PLANT FOR TREATING SLAG.

No. 433,137.

Patented July 29, 1890.



Witnesses:
Thos. Gaylord,
Clifford N. White.

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UNITED STATES PATENT OFFICE.

ORRIN B. PECK, OF CHICAGO, ILLINOIS, ASSIGNOR TO MELINDA PECK, OF
SAME PLACE.

CENTRIFUGAL PLANT FOR TREATING SLAG.

SPECIFICATION forming part of Letters Patent No. 433,137, dated July 29, 1890.

Application filed March 3, 1890. Serial No. 342,426. (No model.)

To all whom it may concern:

Be it known that I, ORRIN B. PECK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Smelting-Furnace Apparatus, of which the following is a specification.

The object of my invention is to avoid wastage of water used in connection with centrifugal machines employed in the treatment of molten material from smelting-furnaces; and the invention consists in the features and combinations hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of my improved water-saving apparatus, and Fig. 2 an enlarged broken section of a portion of the discharge-pipe above the slag car or receptacle.

A is a centrifugal machine for treating molten slag; B, a pump connected therewith; C, a pipe leading from the pump; D, a car or receptacle for receiving the slag and water pumped away from the centrifugal machine; E, a receptacle in which the overflow-water is caught, and F a pipe or trough for conducting the water back to the centrifugal machine.

It is necessary in the treatment of molten slag by centrifugal machines to use water for cooling the slag and to enable it to be pumped away. In many places, however, there is a scarcity of water, so that it becomes necessary to use the water over repeatedly, so as to avoid all unnecessary waste.

My present invention is especially adapted

for use in smelting-furnaces where it is desired to use the water more than once.

I provide the pump connected with a centrifugal machine with a suitable discharge-pipe, which preferably extends upwardly above the level of the machine. This pipe extends to the place where it is desired to deposit the slag. The car or receptacle into which it is intended to deposit the slag is placed below the spout or spouts of this pipe, and below that part of the car from which the water flows or connected with it is a vessel adapted to receive the overflow-water. From this vessel a pipe or trough extends back to the centrifugal machine, by which the overflow-water may be carried back to such machine. In this way I am enabled to prevent the wastage of water by conducting it back for use in the centrifugal machine as often as desired.

I claim—

The combination of a centrifugal machine for treating molten material, in which machine water is employed, a pump for forcing the material away from the centrifugal machine, a conduit for conducting the material to the place of deposit, a receptacle for receiving the water and slag, a receptacle for receiving the overflow-water, and a conduit for conducting the water back to the centrifugal machine, substantially as described.

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Witnesses:

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