(12) **United States Patent**
Wapples

(10) **Patent No.: X9273**
(45) **Date of Patent: Nov. 30, 1835**

(54) **SPARK CATCHER**

(76) Inventor: **James W. Wapples**

James W. Wapley of Wilmington, State of Delaware

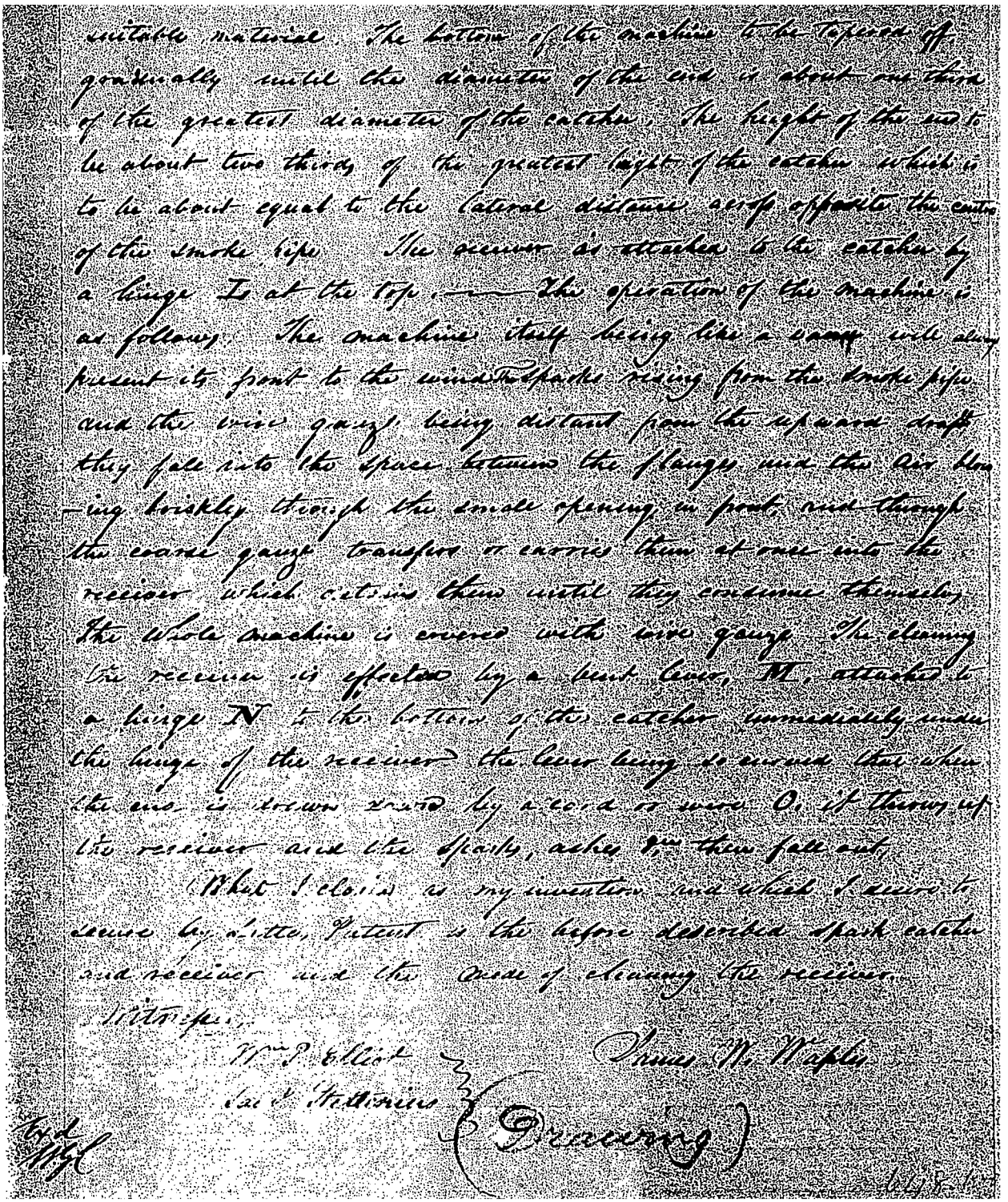
Letters Patent

The schedule referred to in these Letter Patent and making part of the same containing a description in the words of the said James W. Wapley himself of his improvement in the Spark catcher to be attached to the pipe of stationary Engine

To all persons to whom these presents shall come

James W. Wapley of Wilmington in the County of New Castle and State of Delaware, Engineer send greeting —

Be it known that I the said James W. Wapley, have invented constructed made and applied to use a new and useful machine called "Wapley Spark catcher" specified in the words following viz. The machine consists of two principle parts the catcher A, and receiver B. and is constructed of wire gauze sheet iron or tin zinc or copper the catcher is of a circular form and consists of two flanges C.D connected at the bottom forming a trough E; the inner one is connected by cross bars playing upon a spindle F closely around the exterior of the top of the smoke pipe G, The flanges to be distant from each other from four to six inches proportional however to the diameter of the pipe The flanges are to be of the same height until from the point H, opposite to the centre of the pipe when the outer one is gradually tapered down in front of it to the eighth of an inch or thereabouts leaving an open space I between the wire gauze and that part of the flange allowing the air to pass freely in without obstruction, at that place, The wire gauze K is attached to the outer flanges and from a point opposite the spindle to the front is to be of a coarser texture than that upon the remainder of the catcher and the receiver, The bottom ring and end to the height of the flanges are to be made of tin sheet iron, copper, or other



suitable material. The bottom of the machine to be tapered off gradually until the diameter of the end is about one third of the greatest diameter of the catcher. The height of the end to be about two thirds of the greatest height of the catcher which is to be about equal to the lateral distance apart of the centre of the smoke pipe. The receiver is attached to the catcher by a hinge L at the top. The operation of the machine is as follows. The machine itself being like a cone will always present its point to the wind. The sparks arising from the smoke pipe and the wire gauze being distant from the upward draft they fall into the space between the flanges and the air blowing briskly through the small opening in front, and through the coarse gauze transfers or carries them at once into the receiver which retains them until they consume themselves. The whole machine is covered with wire gauze. The cleaning the receiver is effected by a lever Lever, M, attached to a hinge N to the bottom of the catcher immediately under the hinge of the receiver the lever being so arranged that when the end is drawn round by a cord or wire O, it throws up the receiver and the sparks, ashes &c. then fall out.

What I claim as my invention and which I desire to secure by Letter Patent is the before described spark catcher and receiver and the mode of cleaning the receiver.

Witnesses:

Wm. P. Elliot

Chas. Stebbins

James M. Marble

(L.S.)