

T. SHAW.
Fumigator for Green-Houses.

No. 161,163.

Patented March 23, 1875.

Fig. 1

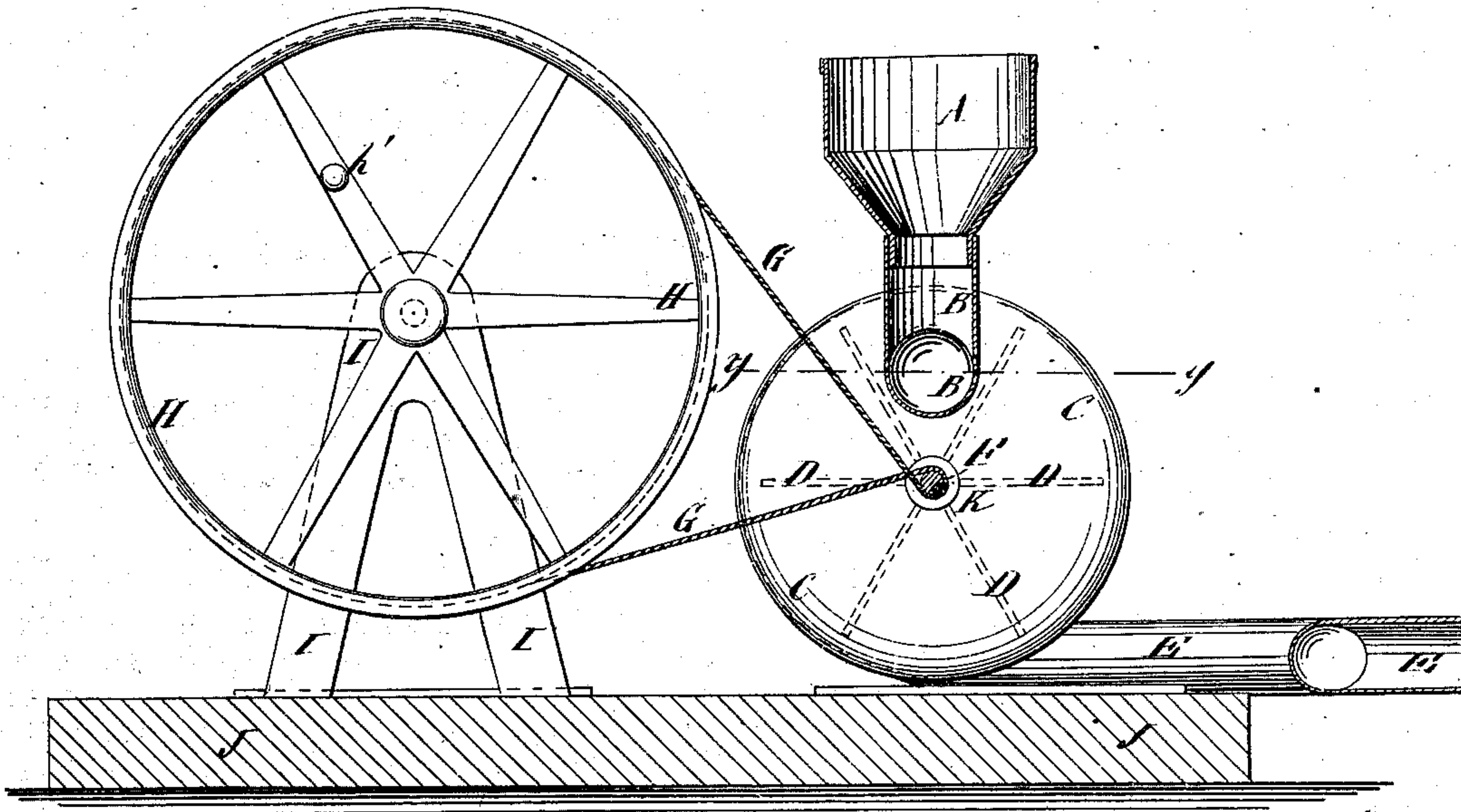
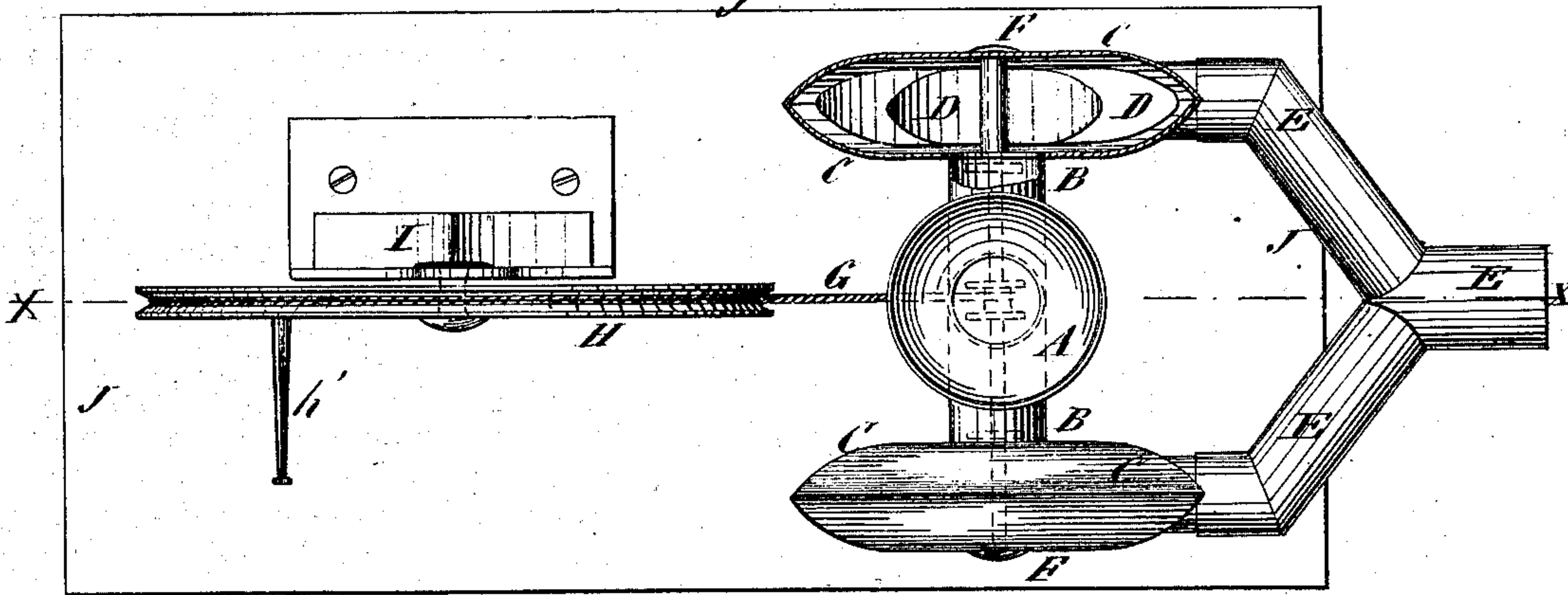


Fig. 2



WITNESSES:

C. Meyers
A. F. Terris

INVENTOR:

Thomas Shaw
BY *Munnell*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS SHAW, OF DANVILLE, PENNSYLVANIA.

IMPROVEMENT IN FUMIGATORS FOR GREENHOUSES.

Specification forming part of Letters Patent No. **161,163**, dated March 23, 1875; application filed November 7, 1874.

To all whom it may concern:

Be it known that I, THOMAS SHAW, of Danville, in the county of Montour and State of Pennsylvania, have invented a new and useful Improvement in Fumigator for Greenhouses, &c., of which the following is a specification:

Figure 1 is a side view of my improved fumigator, partly in vertical section, through the line *x x*, Fig. 2. Fig. 2 is a top view of the same, partly in horizontal section, through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved machine for fumigating greenhouses and other places, to destroy insects upon the plants, and for other purposes, which shall be simple in construction, convenient in use, and effective in operation; which will do its work more effectively than the devices heretofore employed for this purpose; and which may be worked outside of the greenhouse, if desired.

The invention consists in an improved fumigator, formed of the hopper, the branched pipe, the fan-blowers, the branched outlet-pipe, the shaft, the small wheel or pulley, the belt, and the large wheel, constructed and operating, in connection with each other, as hereinafter fully described.

A is a funnel-shaped hopper or receptacle, to receive the tobacco or other substance to make a smoke, and which is made detachable, so that it can be conveniently removed to empty out the ashes and clean it. The hopper A rests upon a pipe, B, which is branched, and the ends of its branches are connected with the cases C of two fan-wheels, D. With

the discharge-openings of the cases C are connected the branches of the pipe E, from which the smoke is discharged. The fan-wheels D are attached to the ends of a shaft, F, which revolves in bearings in the cases C, and to the center of which is attached a small wheel or pulley, K, around which passes a belt, G, which also passes around a large wheel, H, which is pivoted to a standard, I, attached to the base-board J, to which the cases C are also attached. The wheel H is provided with a handle or crank-pin, *h'*, by means of which it is turned.

In using the machine, the tobacco or other substance to make the smoke is placed in the hopper A, and a live coal is placed upon it. The wheel H is then turned in such a direction that the fans D will draw the air in through the hopper A, and discharge it, loaded with smoke, through the pipe E. In this way the entire greenhouse can be entirely filled with smoke in a very short time.

With this construction the device can be placed and operated upon the outside of the greenhouse, the pipe E being inserted in a hole formed in the door for that purpose.

I am aware that several fumigators have been heretofore patented, aiming to destroy insects by the aid of noxious vapors; hence,

What I claim is—

The combination, with hopper A and suction-fans C C, connected by pipe B and discharging through pipe E, of the hand mechanism F G H *h'*, all arranged upon a base, J, to form a conveniently-portable greenhouse fumigator.

THOMAS SHAW.

Witnesses:

G. W. VAN FOSSEN,
L. K. MOWRER.