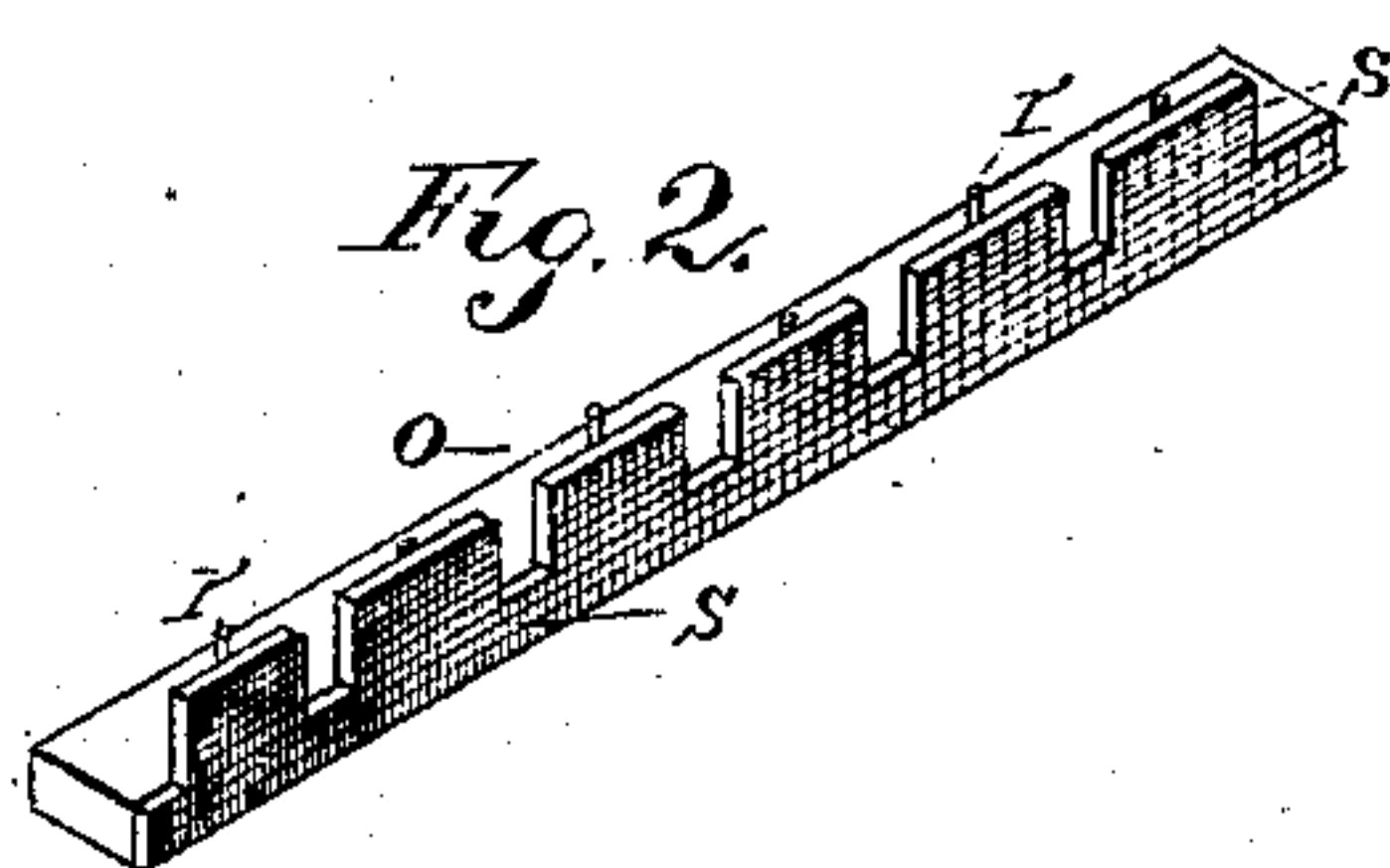
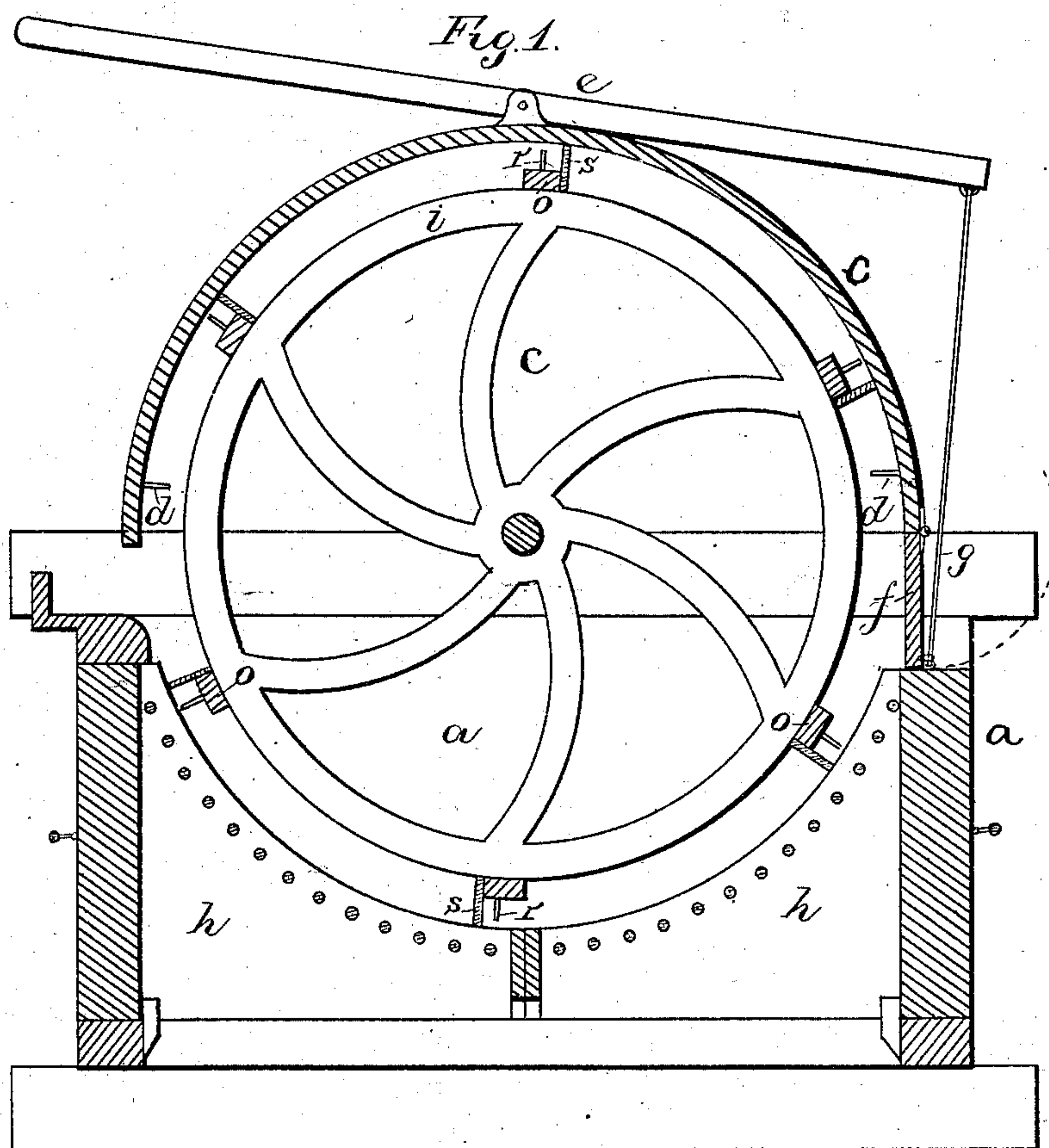


W. A. STEERE.
Machine for Separating Yarn from Flyings, &c.
No. 237,334. Patented Feb. 1, 1881.



Witnesses:

J. W. Garner
A. S. D. Haines

Inventor:

Wm. A. Steere,
per
F. A. Lehmann,
att'y.

UNITED STATES PATENT OFFICE.

WILLIAM A. STEERE, OF PROVIDENCE, RHODE ISLAND.

MACHINE FOR SEPARATING YARN FROM FLYINGS, &c.

SPECIFICATION forming part of Letters Patent No. 237,334, dated February 1, 1881.

Application filed July 18, 1879.

To all whom it may concern:

Be it known that I, WM. A. STEERE, of Providence, in the county of Providence and State of Rhode Island, have invented certain
5 new and useful Improvements in Machines for Separating Yarn from the Flyings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which
10 it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in machines for separating the yarn from the
15 flyings; and it consists in a suitable inclosing-frame having movable gratings on the bottom, and a cover that has projections extending inward into the frame, in combination with an open revolving cylinder that revolves in
20 the frame, and which is provided with lags having both teeth or projections and flexible flaps, as will be more fully described herein-after.

Figure 1 is a vertical section of my invention, and Fig. 2 is a detail view of the same.

a represents a suitable inclosing-frame, of any desired size, and *c* is a removable cover, which has two or more rows of pins or projections, *d*, extending entirely across it. On top
30 of this cover is pivoted the lever *e*, which is connected with the discharging-door *f* by the rod, cord, or chain *g*. In the lower part of the frame *a* are placed the two removable screens *h*, the wires or rods of which extend
35 horizontally across, and are arranged on a circle or curve, as shown, so as to correspond to the shape of the cylinder.

The open revolving cylinder *i* is journaled in the top of the frame, and has secured to its
40 periphery, at suitable distances apart, any necessary number of lags *o*, which run parallel with the wires or rods of the screen. Each lag is provided with a number of projections or teeth, *r*, and a flexible flap, *s*. These flaps

have suitable notches cut in their outer edges, 45 so that they can pass by the pins *d* in the cover without any interference. As the cylinder revolves, these flaps act as fans to keep a constant current of air moving, so as to separate the flyings from the yarn. 50

The yarn is placed inside of the frame, the door *f* is closed, and the cylinder is made to revolve by any suitable power. The teeth in the lags carry up the yarn, and these teeth, together with the ones *d* in the cover, separate 55 the flyings and short material from the yarn, while the flaps serve to keep the short waste and flyings constantly moving. This waste falls down through the screens *h*, while the yarn is carried round and round, and after it 60 has been cleaned sufficiently is forced out through the door *f*, which is opened for that purpose by pulling down on the rod or lever *e*. By pulling out the removable screens *h*, which form the bottom of the frame *a*, all of 65 the waste is readily removed.

By means of this machine the yarn can be readily and quickly cleaned, and separated from the waste more readily and cheaply than
70 by any of the machines heretofore used for that purpose. The flaps, by being arranged as here shown, serve as fans to keep the light particles moving to brush and blow them out of the yarn.

Having thus described my invention, I 75 claim—

In a machine for the purpose described, the combination of a covered frame, a revolving cylinder, *i*, provided with the lags *o*, teeth *r*, and flaps *s*, and screens *h*, the cover of the 80 frame being provided with the teeth *d*, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

WM. A. STEERE.

Witnesses:

CHAS. A. WILSON,
STEPHEN SMITH.