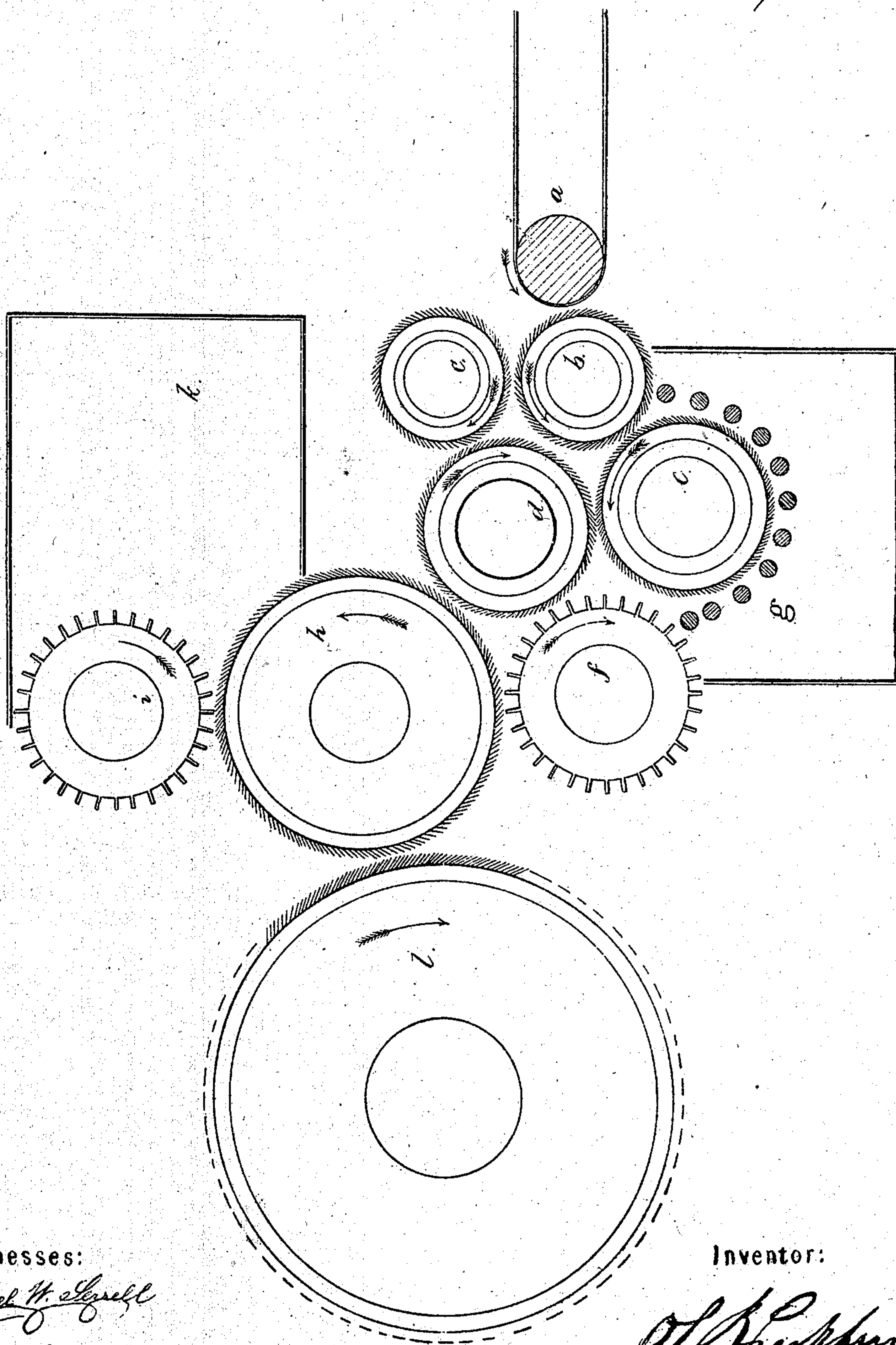


S. R. Parkhurst
Mach. for cleaning wool &c.

No 35621.

Patented June 17 1862.



Witnesses:

Lemuel W. Lywell

Thos. Geo. Harold

Inventor:

S. R. Parkhurst

*The drawing in this patent
is not in print.*

UNITED STATES PATENT OFFICE.

STEPHEN R. PARKHURST, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINERY FOR CLEANING WOOL, COTTON, &c.

Specification forming part of Letters Patent No. 35,621, dated June 17, 1862.

To all whom it may concern:

Be it known that I, STEPHEN R. PARKHURST, of the city and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Means for Cleaning Cotton, Wool, and other Fibrous Substances; and I do hereby declare that the following is a full, clear, and exact description of the nature of my said invention, reference being had to the annexed drawing, making part of this specification, wherein I have represented a vertical cross-section of the arrangement of rollers, cylinders, and beaters to which my invention relates.

My said invention consists in the combination of toothed feed-rollers with a pair of burr-cylinders and a beater, whereby the fibers are opened and the foreign substances removed by the beater; and in combination with the said burr-cylinders I employ a third burr-cylinder and a beater that operate on the opposite side of the fiber to that operated on by the first burr-cylinders, and remove any foreign substances that might previously have been enveloped in the fibers. From this last burr-cylinder the fibers are taken by the "licker-in" of a carding-machine, or by a brush, doffer, or other convenient means, according to requirements of the manufacturer.

In the drawing, *a* is the apron.

b and *c* are the feed-rollers, formed with surfaces of teeth set in the manner shown, so that the teeth point backward as they revolve.

d is a burr cylinder formed with a surface of teeth, and the cylinder is revolved in the direction shown by the arrow with the teeth point first. These draw the fibers off the feed-roller teeth *c*.

e is a burr-cylinder revolved in the direction shown, so that the teeth draw the fibers off the feed-roller *b* and convey them to the said burr-cylinder *d*, the periphery of which, moving slightly faster than that of the cylinder *e*, removes the fibers therefrom. All these operations open and loosen the locks of wool or other fibers, and the beater *f*, revolved in the direction shown, knocks off any burrs or foreign substances into the grate *g*, and they fall

through the same, while any fibers are caught and returned by the cylinder *e*, to be operated on as before.

From the cylinder *d* the fibers are taken by the burr-cylinder *h*, the surface of which travels faster than that of the cylinder *d*, and by this the fiber is not only opened and loosened, but the side of the fibrous bat that was next the beater-cylinder *f* now comes next this cylinder *h*, while the side of the fibrous mass that was next the cylinder *d* now comes on the outside and is exposed to the cleaning operation of the second beater-cylinder, *i*, that removes any foreign substances that remain, throwing them into the box *k*. Thus the fibers are thoroughly opened or loosened and both sides of the mass are exposed to the cleaning operations, that effectually and thoroughly remove foreign substances, leaving the fibers ready for any subsequent operations in the manufacturing.

l represents a portion of the licker-in of a carding-machine; but a blower or any other device may be employed for removing the fibers from the cylinder *h*.

The gearing, pulleys, or belts employed to revolve the respective cylinders, rollers, and beaters in the correct direction and with the required speed may be of any ordinary or desired character, and, forming no part of my present invention, do not require further description.

What I claim, and desire to secure by Letters Patent, is—

1. The arrangement of the cylinders *d* and *e*, feed-rollers *b* and *c*, and beater *f*, substantially as and for the purposes specified.

2. The cylinder *h* and beater *i* when combined with the cylinder *d* and beater *f*, whereby the cotton, wool, or other fiber is exposed on both sides of the bat to the operation of the beaters, as and for the purposes set forth.

In witness whereof I have hereunto set my signature this 26th day of March, 1862.

S. R. PARKHURST.

Witnesses:

LEMUEL W. SERRELL,
THOS. GEO. HAROLD.