## W. Jesths. Spring Cleaner. N°55,662. Patentea Jun. 19,1866.

Inventor Witnesses.

## United States Patent Office.

WELCOME JENCKES, OF MANCHESTER, NEW HAMPSHIRE.

IMPROVEMENT IN CLEANERS FOR RING-TRAVELER SPINNING-MACHINES,

Specification forming part of Letters Patent No. 55,662, dated June 19, 1866.

To all whom it may concern:

Be it known that I, Welcome Jenckes, of Manchester, Hillsborough county, State of New Hampshire, have invented a new and useful Improvement in Cleaners for Ring-Travelers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a back elevation of a cleaner made according to my invention. Fig. 2 is a

top view.

Similar letters of reference indicate like

parts.

The cleaners heretofore known have been either put into the top of the rail stationary or else, as in the case of adjustable rings, attached stationary to the ring itself. Both these modes are objectionable, the latter mode being disadvantageous, among other reasons, because the sizes of travelers vary from one sixty-fourth to three sixty-fourths, running on the same rings, altering from fine to coarse numbers, so that a stationary cleaner that is adjusted for a small traveler will be too close for a larger traveler, and in the way.

The cleaners put in according to the former mode are, of course, not capable of adjustment, and, being usually made of soft metal, are very liable to become broken in brushing off the rail, while it would be an item of great expense to alter the positions of cleaners attached to the rings, because they are put in the rings when the latter are in a soft state, after which they are hardened, so that they cannot be drilled for the purpose of altering the position of the cleaners without first annealing them and then rehardening and finishing them again after adjusting

the cleaners.

My adjustable cleaner obviates these objections and difficulties, and is adapted for use with all the changes one may desire to make in the numbers of the yarn spun, going from larger to smaller travelers, and vice versa. It consists of a horizontal iron pin for each ring, about three-sixteenths of an inch in diameter, | respectively. Through each pillar is a hole

placed radially with the tops of the rings, each pin projecting from an elevation or pillar formed on the upper edge of sectional plates, which are secured to the back rail of the frame. Said pins are adjustable in and out, and are held in place by adjusting-screws, and can be set as close as need be to the rings, care being taken that they are not so close that the travelers will touch the pins when passing between the rings and cleaner.

The object of this invention is to prevent the waste from lodging in the traveler and breaking the thread, as it will do if not removed

during the operation of spinning.

Among other advantages which it secures, I may mention that it will, by keeping it free of waste, preserve a uniform weight to the traveler, and consequently more uniformity in the drag or tension on the thread while being spun. It will also save time in doffing, there being no occasion to clean the traveler. It will also prevent the breaking of the threads and the accumulation of waste by keeping the traveler from becoming loaded. It will also increase the production of yarn by saving the time heretofore lost in picking off travelers, and enabling one hand to attend more spindles than is now possible, and with less labor.

Since the travelers run about six thousand turns a minute, it is important that the cleaner be capable of nice adjustments in order to clean them while in such rapid motion, and this result is attained by my improvement.

The drawings represent one section of my improved cleaner, it being convenient to cast it in sections whose lengths shall be equal to the space occupied by from about eight to sixteen spindles, according to circumstances.

The letter S designates a hole cast in the section to receive a screw, by means of which

it is fastened to the rail.

The holes D are provided to make room for the screws on the back side of the rail, against which side the cleaner is placed, the edge E of the cleaner coming up level with the top of the rail, so that only the pillars B appear above it when the cleaner is in place.

The pillars are placed opposite the rings

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that receives a rod or pin, A, which projects toward the traveler, being set backward or forward more or less, as desired, and then held by a set-screw, C.

The rods or pins are set as close as possible to the travelers without coming in contact with them, so as to remove the dirt and lint

from them.

I claim as new and desire to secure by Letters Patent—

An adjustable cleaner for ring-travelers, made substantially as above described.

WELCOME JENCKES.

Witnesses:

JAMES RICHARDSON, IRA C. HARDY.