

C. H. FALING.
Blast-Regulators for Grain-Separators.

No. 216,732.

Patented June 24, 1879.

Fig. 1.

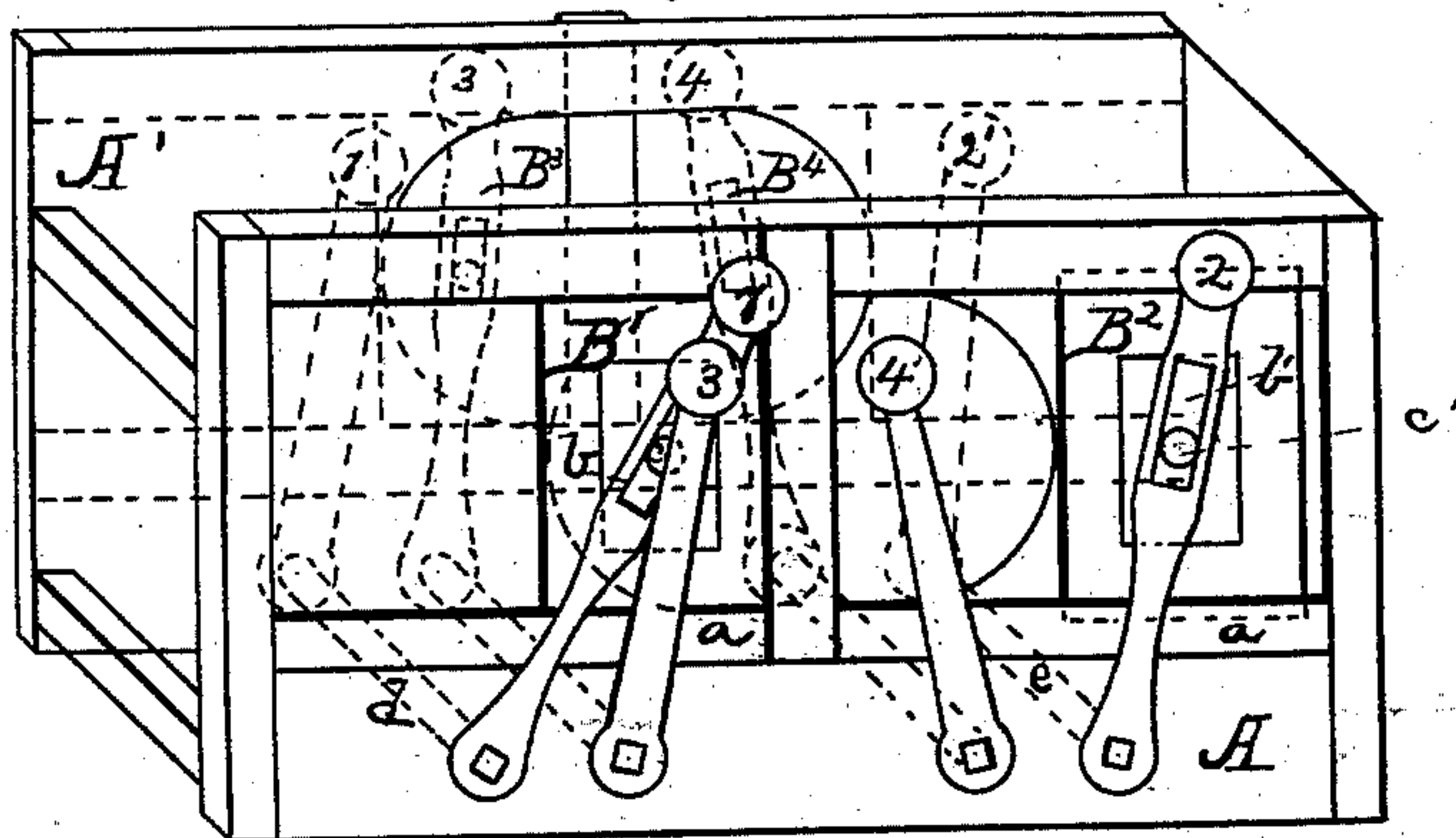
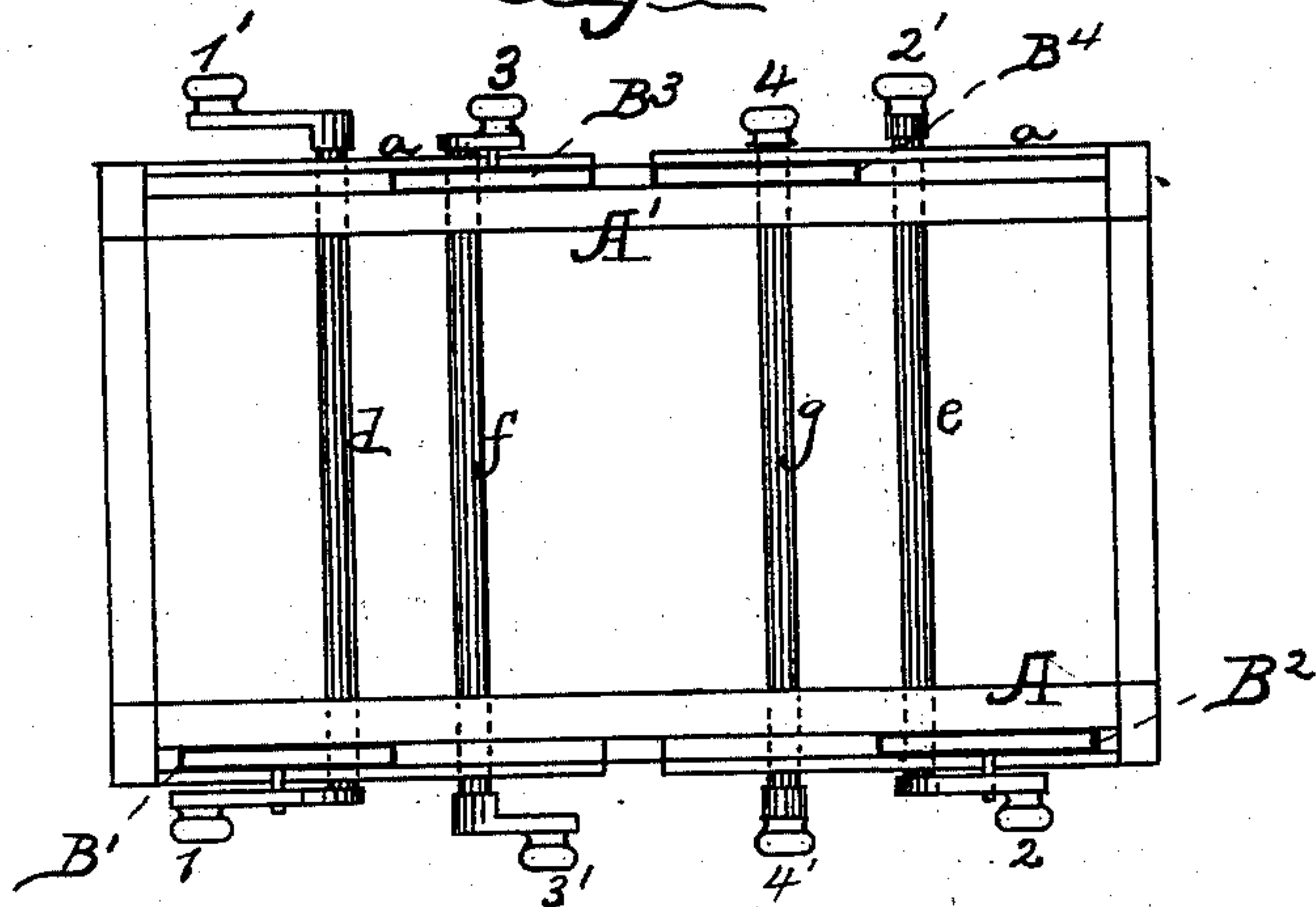


Fig. 2.



Witnesses:

J. H. Parsons.
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UNITED STATES PATENT OFFICE.

CHARLES H. FALING, OF TONAWANDA, NEW YORK.

IMPROVEMENT IN BLAST-REGULATORS FOR GRAIN-SEPARATORS.

Specification forming part of Letters Patent No. **216,732**, dated June 24, 1879; application filed March 31, 1879.

To all whom it may concern:

Be it known that I, CHARLES HIRAM FALING, of Tonawanda, in the county of Erie and State of New York, have made certain Improvements in Blast-Regulators for Grain-Separators, of which the following is a specification.

The object of this invention is to permit the opening or closing, wholly or partly, of the slides on both sides of the fan-case from either side of the machine, so as to graduate the draft or flow of wind through the fan-case; and the invention consists in the arrangement of four lever-handles on each side, attached to rods, two of the lever-handles operating the slides of one side, and two others the slides on the opposite side, all as hereinafter fully explained.

In the drawings, Figure 1 is a perspective of the fan-case, &c.; and Fig. 2, a plan of the same, showing the sides, the rods, and the lever-handles.

A A' represent the sides of the case. (The fan not shown.) B¹ B² B³ B⁴ are the slides, two on each side, and moving in longitudinal ways *a a*, as usual.

The objection to these slides in separators, &c., is, that the machine at work in a barn is liable, by the peculiar direction or force of the wind, to require frequent adjusting of the slides—that is, one side to be partly closed or partly open, as the case may be—or a shift of wind will blow the stuff in such a way as to require closing the slides on the opposite side. To do this one must clamber over the machine, or crawl under or go around it—sometimes a difficult matter, in consequence of the accumulation of the grain or other stuff that is being separated piling up about the machine.

To obviate this, and operate all the slides from one side, I attach to each of the four slides (two on each side) a lever-handle, 1 2 3 4. For example, No. 1 lever operates slide B¹ by having a slot, *b*, in the side of the lever, with a pin, *c*, attached to slide B¹, projecting through; No. 2, the same, having also a slot, *b'*, in the lever, with a pin, *c'*, attached to the slide B². By these levers 1 2 the slides on this side are opened or closed, and to open

or close them from the other side the lower ends of both these levers are set on by nuts, keys, or other devices, each to a rod running under the fan-case, coming out on the opposite side, and with short levers 1' 2' attached to the rod similar to Nos. 1 and 2. Thus, lever 1, attached to rod *d*, has lever 1' on the other side, both operating slide B¹. Lever 2, attached to rod *e*, has lever 2' on other side, both operating slide B² from either side. The other side of the fan-case A' is the same, except that on side A the long levers 1 2 are attached to the slides, and on the other side, A', levers 3 4 are attached to slides B³ B⁴ on that side, the same as lever 1 2 are on side A, by slots and pins. These levers are secured to rods *f g*, running under the fan-case, the same as rods *d e*, and having on the side A short levers 3' 4', similar to 1' 2' on the other side, A'.

In Fig. 1 side A is shown with one side of the slides open, B², and the other side, B¹, shut. On the opposite side, A', both slides are closed.

In Fig. 2 both slides of the side A' are shut, and both open in side A.

Of course any adjustment of the slides on either side, or both, is thus obtained by the person attending to the working of the machine from the side where he stands. Each lever only operates its particular slide. It is applicable to any fan-case where such an adjustment of the air-openings or slides is important to be operated from a single side.

I claim—

In a grain-separator, a fan-case having its air-inlet openings provided with valves, said valves being each connected to a rocking rod passing through the machine, and provided with lever-arms to enable said valves to be independently adjusted from either side of the machine, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES H. FALING.

Witnesses:

J. R. DRAKE,
T. H. PARSONS.