

(No Model.)

W. A. COCKRELL.
GRAIN SCOURER.

No. 485,488.

Patented Nov. 1, 1892.

Fig. 1.

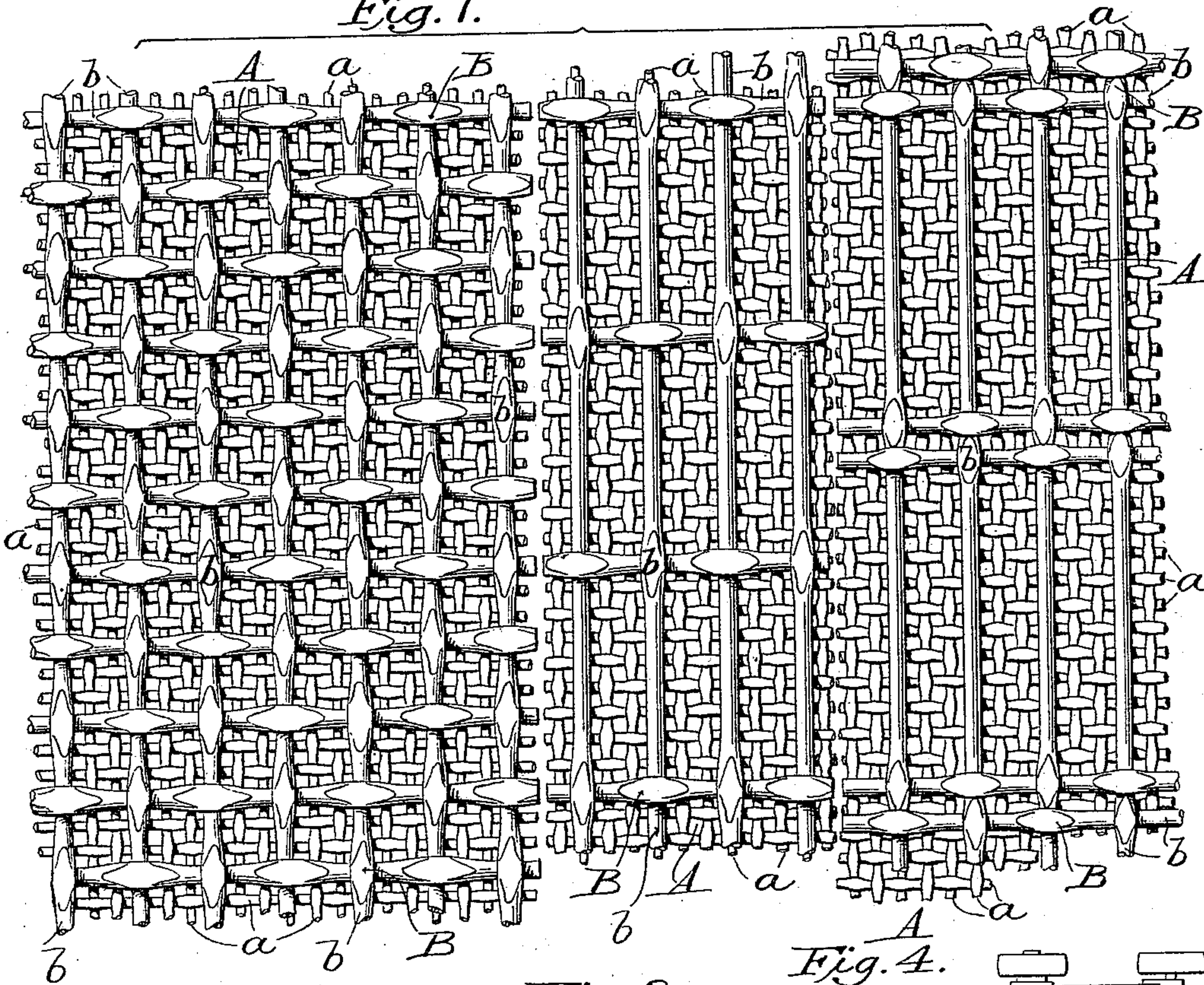


Fig. 2.

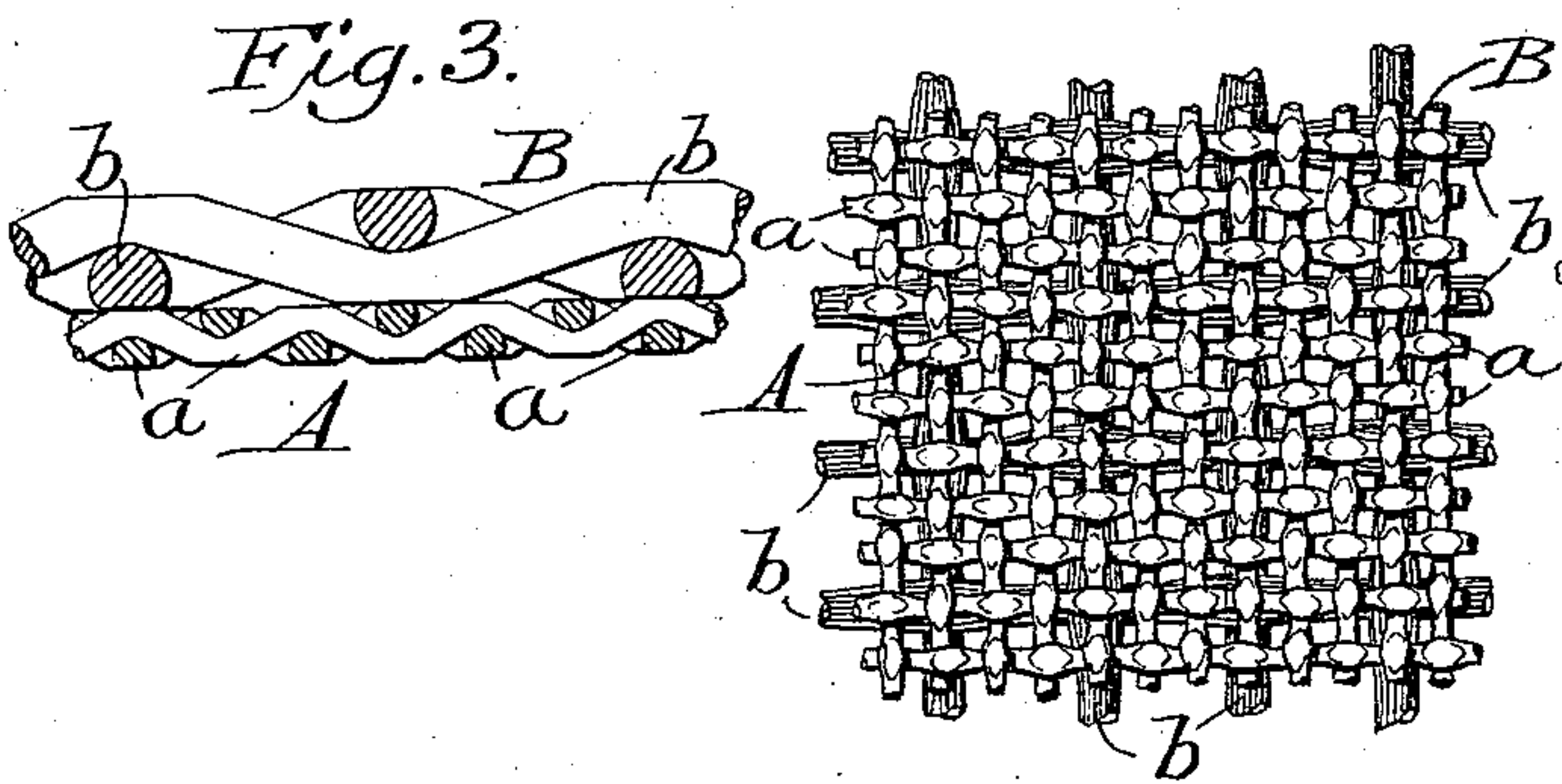


Fig. 3.

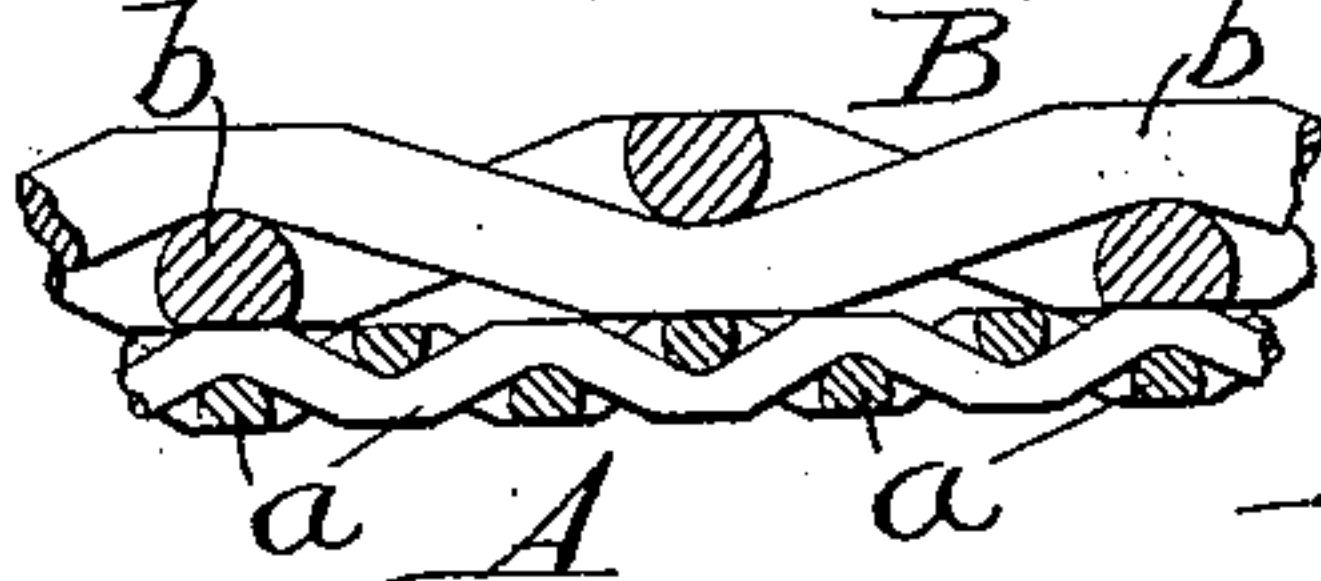
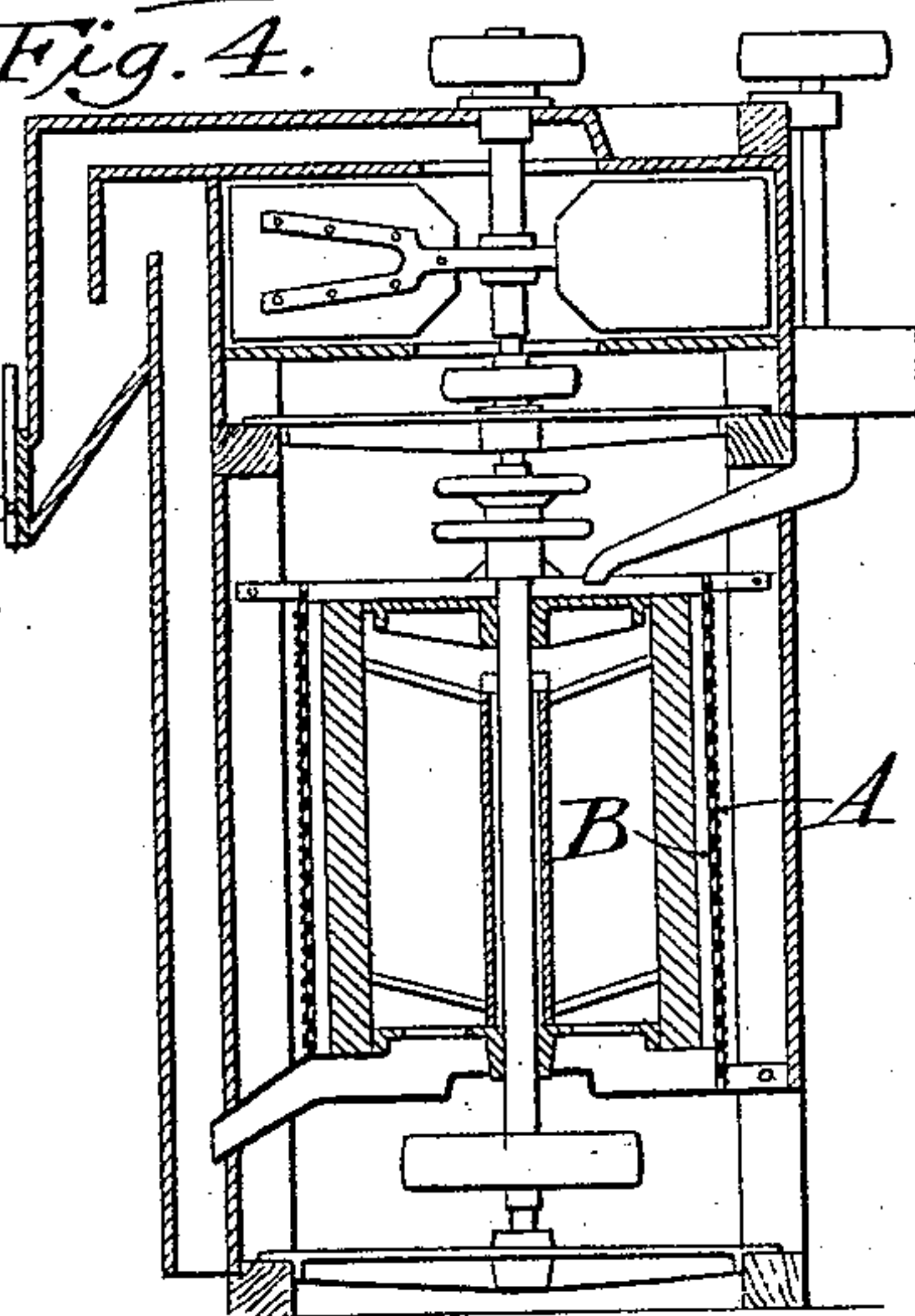


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM A. COCKRELL, OF MOUNT PERRY, OHIO.

GRAIN-SCOURER.

SPECIFICATION forming part of Letters Patent No. 485,488, dated November 1, 1892.

Application filed June 15, 1892. Serial No. 436,856. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. COCKRELL, a citizen of the United States, residing at Mount Perry, in the county of Perry and State of Ohio, have invented certain new and useful Improvements in Grain-Scourers, of which the following is a specification.

My invention relates to grain-scourers, and has reference more particularly to the construction of the scouring surface or surfaces.

The invention comprises a scouring case or shell composed of two separate layers of woven wire pressed or flattened, so that the strands or wires will be interlocked where they cross, the inner layer being of much heavier material and of wider or larger mesh than the external layer.

In the drawings, Figure 1 is an inside face view of the scouring-surface, and Fig. 2 an outside face view; Fig. 3, an enlarged sectional view of the fabric or scouring-surface, and Fig. 4 a vertical sectional view of one form of scourer having my improved scouring-surface.

A indicates the external or outer shell or layer of the scouring-surface, composed of the wires *a*, woven close enough together to prevent the small grain from passing through, though affording ample ventilation and an outlet for dust, smut, fuzz, &c., released from the grain. After the wires are woven the fabric is passed through rolls or otherwise flattened, so as to compact it and give it an even surface.

The internal shell or layer B is composed of wires *b*, woven together in the same manner as is the outer layer; but the wires *b* are much heavier than the wires *a* and are spaced farther apart than the said wires *a*, so as to produce a larger mesh. These wires *b* should be flattened somewhat before they are woven, while the completed shell or surface B after

being woven is also flattened and rendered compact by being passed between rollers or in other suitable manner. Surface B receives the impact of the flying grain as it is whirled around within the case, and thus relieves the external surface A from undue wear due to the sliding action of the grain.

It was found in practice that besides wearing away the surface A the work was uneven, there being too much rubbing of the sides of the berries and not enough on the ends. These objections are overcome by the use of the internal layer B, which serves to interrupt the flow of the grain and give it an alternating movement, bounding and rebounding between the case and beaters. It retains the grain in the machine a longer time and does more effectual work on the ends of the berries, besides increasing the strength and life of the machine. At the right-hand side of Fig. 2 I have shown some slight modifications in the form of mesh of the inner layer or surface.

Having thus described my invention, what I claim is—

1. In a grain-scouring machine, the combination, with the fine woven-wire fabric flattened or compressed, of the inner coarse woven-wire fabric secured thereto and flattened or compressed.

2. In a grain-scouring machine, the combination, with an external surface composed of compressed woven wire, of an internal surface of compressed woven wire secured thereto, the internal surface being composed of larger wires and having larger mesh than the external surface.

In witness whereof I hereunto set my hand in the presence of two witnesses.

WILLIAM A. COCKRELL.

Witnesses:

OWEN YOST,

JOHN S. EVERSOL.