

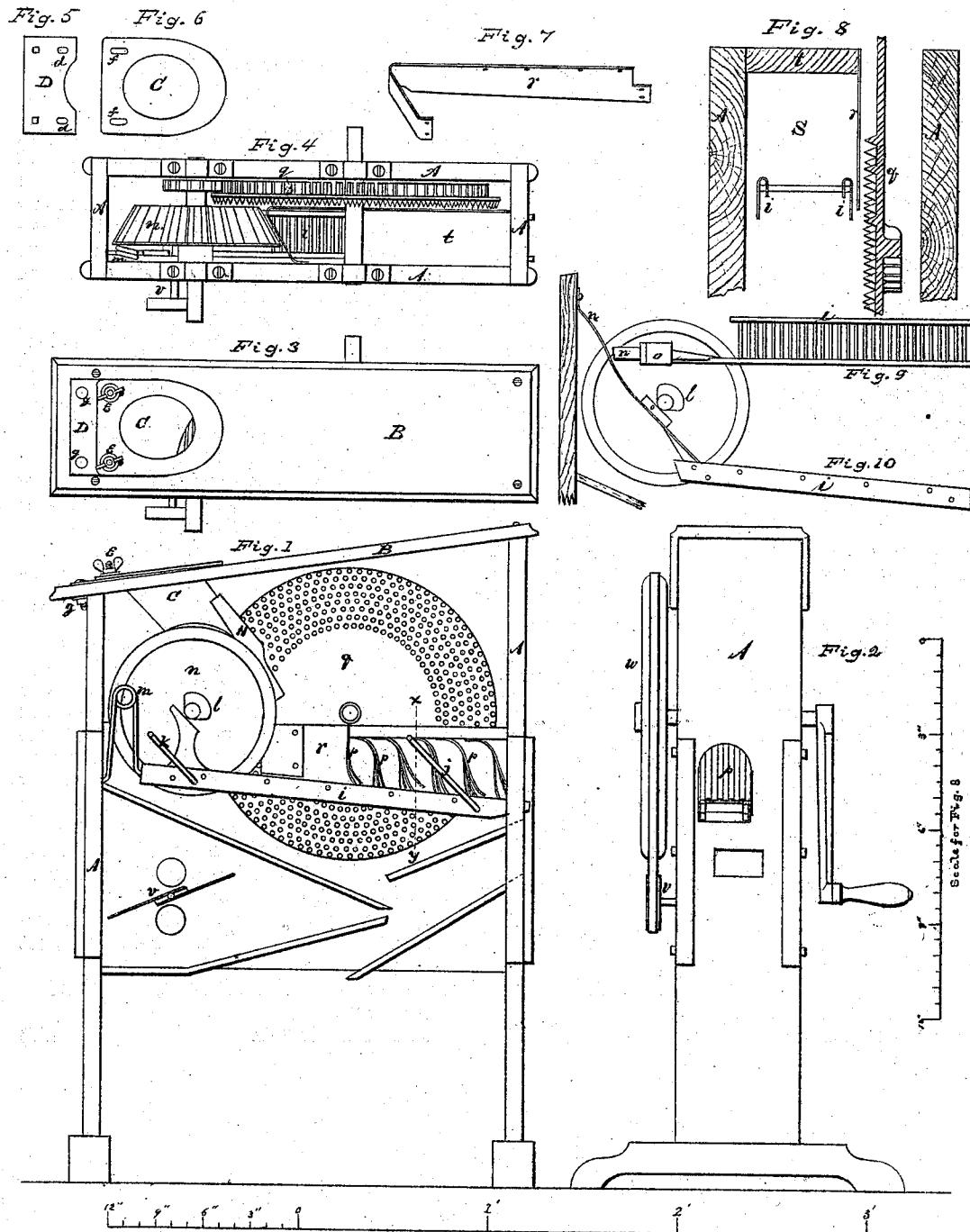
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D. G. WELLS.

Improvement in Corn Shellers.

No. 122,749.

Patented Jan. 16, 1872.



WITNESSES:

McGrand
James B. Speer

INVENTOR

D. G. Wells

UNITED STATES PATENT OFFICE.

DAVID G. WELLS, OF JOLIET, ILLINOIS.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. 122,749, dated January 16, 1872.

Specification describing certain Improvements in Corn-Shellers, invented by DAVID G. WELLS, of Joliet, Will county, and State of Illinois.

My improvements are in that class of machines known as the dish and picker-wheel corn - shellers, and relates, first, to the construction and combination of the throat with the spring which actuates it, so as to render them reliable and durable, and reduce their cost of manufacture; secondly, to the mode of constructing the shaker-screen, so that it shall be light, yet strong and durable.

In the accompanying drawing, Fig. 1 is a side elevation of the sheller, with the front side removed in order to show the internal construction. Fig. 2 shows that end of the machine which is at the right hand in Fig. 1. Fig. 3 is a plan; and Fig. 4 is the same, with the cover removed to show the parts below. Figs. 5, 6, 7, 8, 9, and 10 refer to details of the machine.

A is the frame of the machine, and B the cover. C is the throat through which the corn to be shelled is fed into the machine. The flange of this throat rests upon the cover B and is connected by its rear or lower edge to the flexible plate D by two adjusting-bolts, *e e*, passing through slotted holes *d* and *f* in the flange and plate, which serve to hold the throat C in its proper position, as shown in Fig. 3 of the drawing. The plate D acts as a spring to the throat C, with its tongue H imparting to it a vibratory motion when the machine is being operated. The general shape of this plate and flange is more fully shown in Figs. 5 and 6. The plate D is made of sheet-steel of sufficient thickness to possess the necessary elasticity, which may be increased or diminished by changing the position of the adjusting-bolts which secure it to the throat C.

The shaker-screen *i* is used for separating the corn from the cobs after it is shelled. It is made with sheet-iron sides and round iron cross-bars. A row of holes is punched through the sides near one edge to receive the cross-bars. The sides are then folded lengthwise so as to present a thickness of metal opposite each hole, which prevents the cross-bars from moving endwise in the holes, as shown in Fig. 8, which is a cross-section on the line *x y*. About every sixth bar extends through both thicknesses of metal and is securely riveted, which holds the whole firmly together. It is desirable that the shaker-screen be made wholly of iron, as wooden sides are soon worn away by the action of the grain. It is also desirable that they be as light as possible consistent with strength, as a heavy shaker-screen absorbs more power and racks the machine more than a light one. These desirable qualities are obtained by this mode of constructing the shaker-screen. It is suspended by links *j k* in the usual way, or by a strip of steel, *n*, Figs. 9 and 10, which also acts as a spring. It is worked by a cam, *l*, on the shaft of the dish-wheel *u*. The corn is prevented from going out with the cobs by the screens *p p*. The partition-plate *r* prevents the picker-wheel from carrying the corn out with the cobs. The blower *v* is driven by a belt from the periphery of the fly-wheel *w*.

I claim as my invention—

1. The combination of the flexible or spring-plate D and throat C, substantially as and for the purpose hereinbefore set forth.
2. The shaker-screen *i*, constructed as described, and for the purpose hereinbefore set forth.

Witnesses: DAVID G. WELLS.

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