

F. L. COLLIS.
Corn-Husking Machine.

No. 228,174.

Patented June 1, 1880.

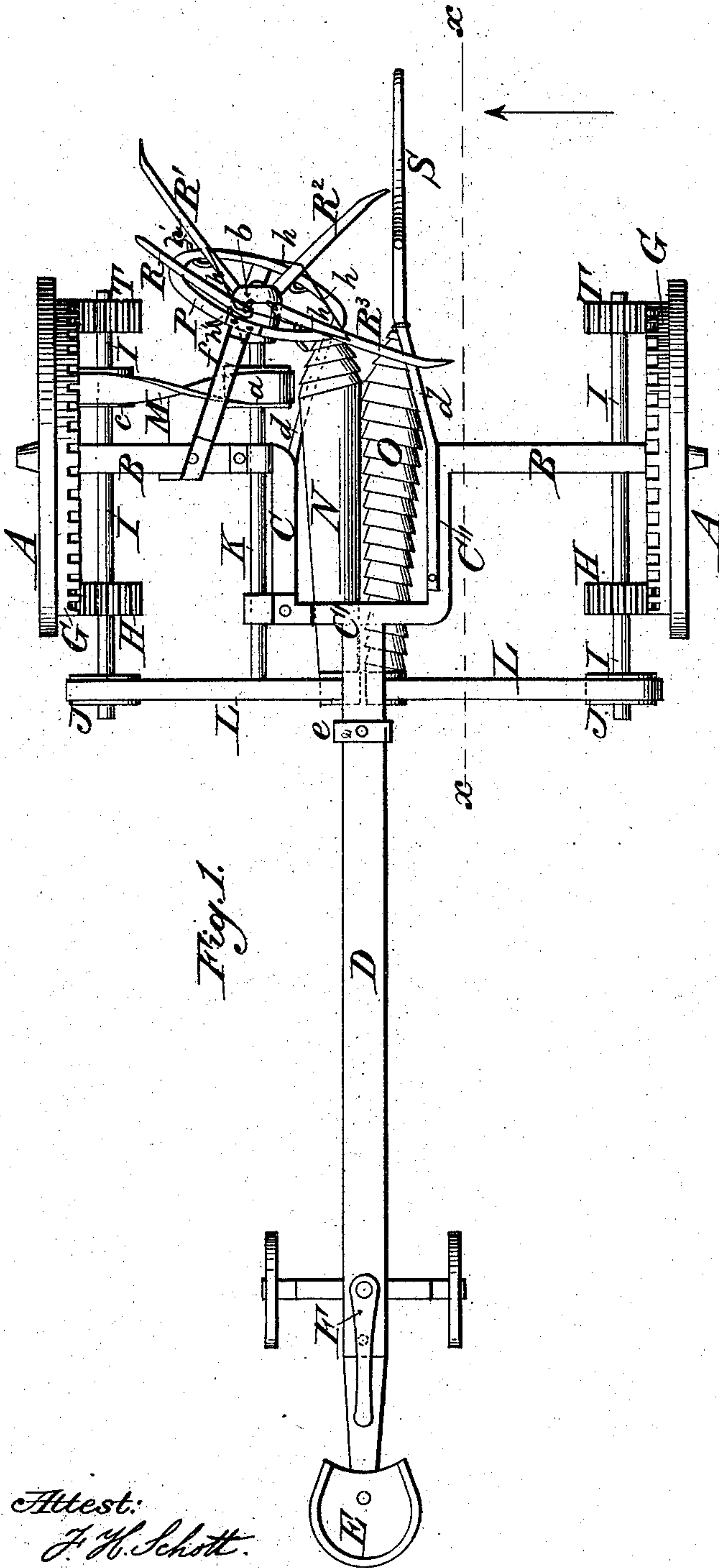


Fig. 1.

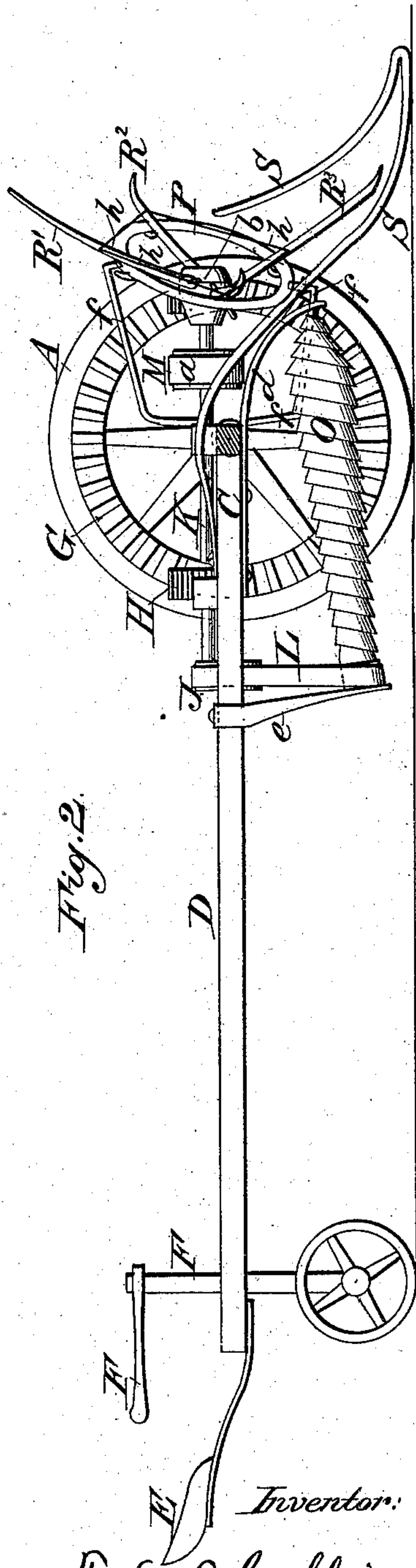


Fig. 2.

Attest:
J. H. Schott.
J. C. Parker

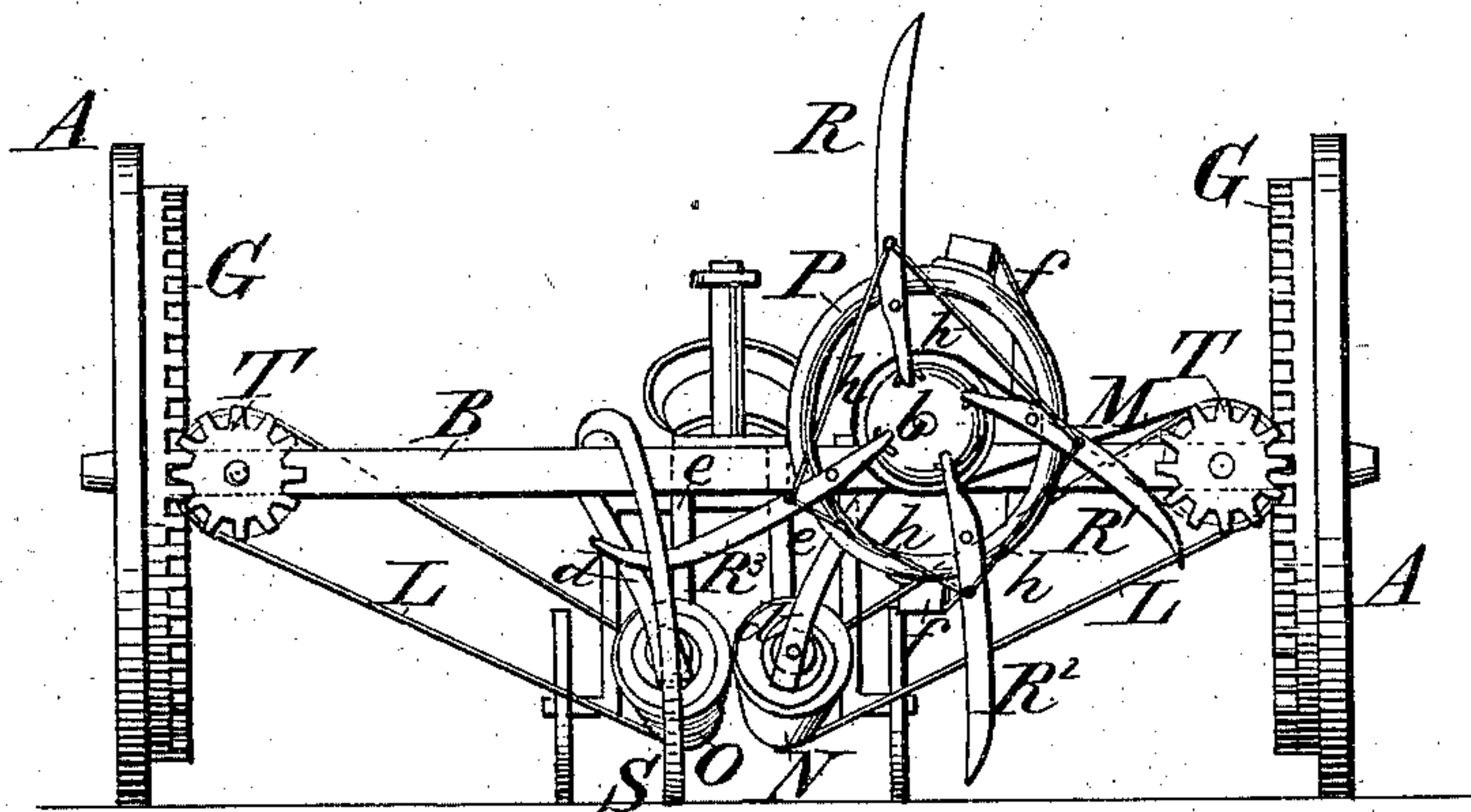
Inventor:
Fred. L. Collis
By Thos. L. Fullerton
Attorney.

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Fig. 3.



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UNITED STATES PATENT OFFICE.

FRED L. COLLIS, OF FREEDOM CENTRE, ILLINOIS.

CORN-HUSKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 228,174, dated June 1, 1880.

Application filed October 18, 1879.

To all whom it may concern:

Be it known that I, FRED L. COLLIS, of Freedom Centre, in the county of La Salle and State of Illinois, have invented certain
5 new and useful Improvements in Corn-Husking Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to
10 make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of farming machinery which is used for husking and gathering corn in the field; and it consists in certain new and improved devices and combination of devices whereby the operation of husking from standing stalks is accomplished
20 with certainty, celerity, and economy.

Figure 1 in the accompanying drawings represents a top or plan view of my machine. Fig. 2 represents a longitudinal vertical section on line *xx* of Fig. 1. Fig. 3 represents
25 a front view.

A A are ordinary wheels, upon which the machine and its several parts are carried. B B is a rigid axle, made of iron, in one or more parts, bent to the rear at the center, with four
30 right angles and three sides, C C' C'', so as to admit freely the standing corn between the husking-rollers N O, and also to form a horizontal frame for supporting other parts of the machine.

D is the guide and draft pole of the principal machine, which is firmly bolted to the frame at its rear side, C', and to which are attached the horses. E is the seat of the driver, who also guides the machine by the
40 steering device F F.

G G are the driving-wheels, firmly bolted to the tread-wheels A A, to engage with the fixed pinions H H and loose pinions T T.

I I are horizontal shafts mounted transversely upon bearings attached to axle B B, and upon which are the pinions H H and T T and pulleys J J.

K is a horizontal shaft mounted transversely upon a bearing attached to axle B, near its
50 left-hand angle, and running parallel with side C, and having its second bearing at the right

angle formed by the sides C C', to which shaft is attached pulley *a* and rake-head *b*.

L L are chains or belts, by means of which and the pulleys J J and pinions H H power
55 is transmitted from the driving-wheels G G to the husking-rollers N O.

M is a cross-belt, by means of which and the pulley *a* and pulley *c* power is transmitted to the rotary arms R R' R² R³.
60

N O are husking-rollers. They are suspended, immediately under the open space formed by the rearward bend in the axle B B, upon curved bearings *d d*, firmly attached to sides C C' and bearings *e e* attached to the
65 guide-pole D. They may vary in length and diameter, according to the number of revolutions per minute required. They are pointed in front, the more readily to admit the corn-stalks between the rollers, and attenuated in
70 the rear to form an incline, and thus facilitate the movement and delivery of husked corn to any ordinary receptacle to be attached, and also to reduce their surface as they approach the ear of corn, and thus perform the
75 act of husking and picking with less speed. They may be made of any hard substance, one of them to be covered, except at the point, with rubber or any elastic substance that will give way to the pressure of the thread on the
80 other roller and at the same time press upon it, and thus pluck the husk from the ear of corn and force it from its stem. The other roller should have a spiral thread or groove upon its surface, to pass the standing stalks of
85 corn between the husking-rollers as the machine moves forward, and also to assist in tearing off the husk.

P is a circular iron bearing, rigidly fixed in an oblique position by iron braces *f f* to axle
90 B, and having for its center the rake-head *b*. Its face is smooth and undulating, over which rotary arms R R' R² R³ slide in their movements.

R R' R² R³ are four rotary arms pivoted to
95 head *b*, which is attached to shaft K, and they are set in motion by band M and pulleys *a* and *c*. They are spread and kept equidistant by iron rods *h*, and held to their track or bearing P by hooks *h'*. Their particular function
100 in revolving is to gather fallen and leaning stalks on the left, and at the same time to hold

all stalks in position until they are taken hold of by the rollers N O.

S is a stationary runner to pass in front of rotary arms and on the right side of the row of corn to lift fallen stalks and pass them within reach of said arms. It is made of rod-iron of suitable size, and firmly fixed to side piece C'', and has its point doubled back upon itself and inclining to such an elevation as to insure the passage of the lifted or fallen stalk within reach of said arms. Its function, together with said rotary arms, is to marshal all the stalks for the rollers N O.

T T are loose pinions on the ends of shafts I I.

F F is an ordinary steering device in common use. In connection with it any ordinary device may be used for elevating or lowering the operative parts in front.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a corn-husking machine, the combina-

tion of single runner S, formed of rod-iron, so as to admit arms R within its fold, the undulating bearing P, to guide arms R along the form of runner S, the rotary arms R R' R² R³, operating within the fold of said runner S, and the husking-rollers N O, arranged and operated essentially as and for the purposes set forth.

2. The combination of the single runner S, formed of rod-iron, so as to admit arms R within its fold, the undulating bearing P, to guide arms R along the form of runner S, with the rotating arms R R' R² R³, operating within the fold of said runner S, substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of October, 1879.

FRED LEE COLLIS.

Witnesses:

LEMUEL M. PLACE,
JOHN COLLIS.