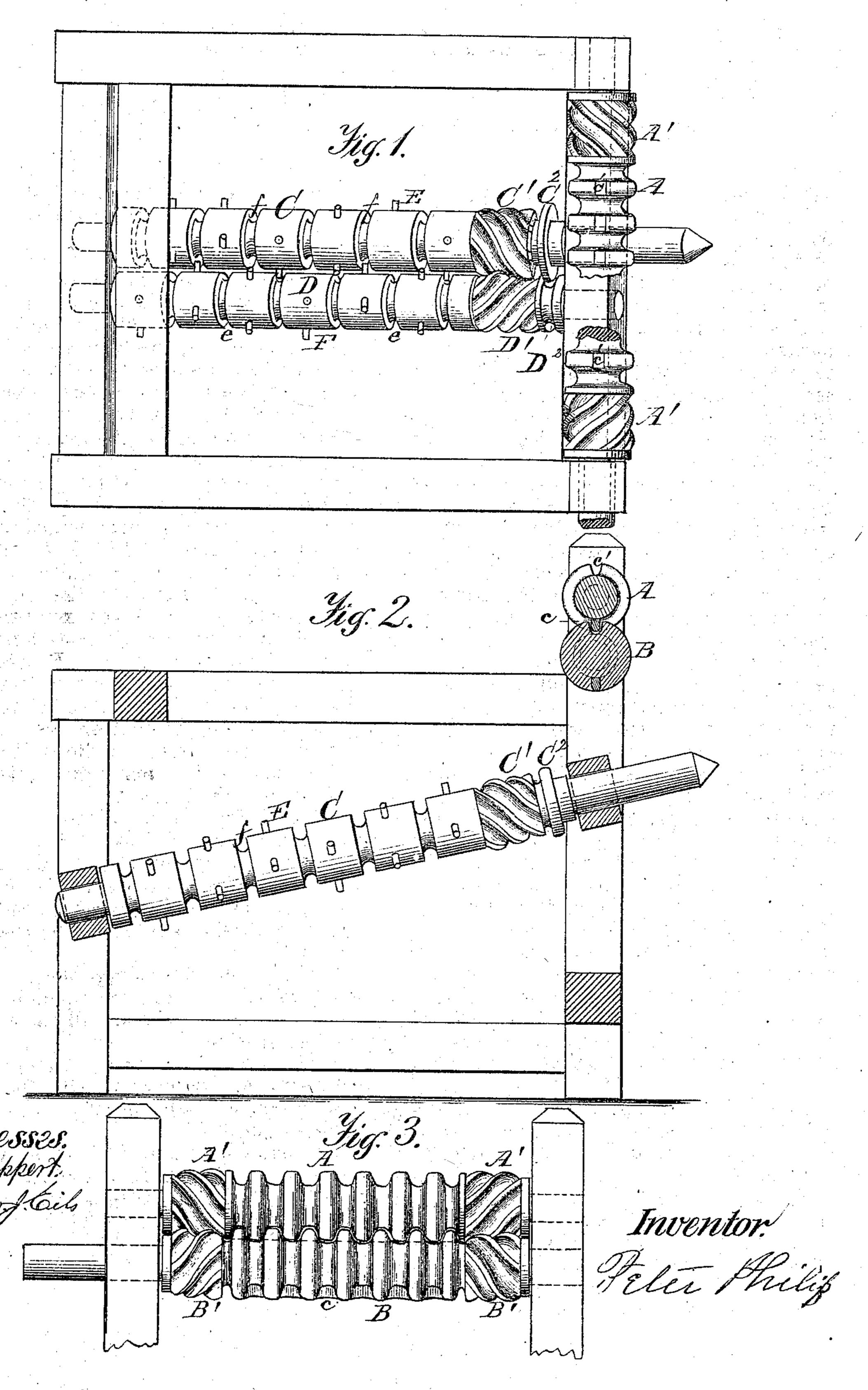
P. PHILIP. Corn-Huskers.

No. 135,840.

Patented Feb. 11, 1873.



UNITED STATES PATENT OFFICE.

PETER PHILIP, OF STOCKPORT, NEW YORK.

IMPROVEMENT IN CORN-HUSKERS.

Specification forming part of Letters Patent No. 135,840, dated February 11, 1873.

To all whom it may concern:

Be it known that I, Peter Philip, of Stockport, in the county of Columbia and State of New York, have invented certain improvements in Corn-Huskers, of which the

following is a specification:

This invention relates to that class of cornhuskers constructed with a set of picking-rolls to pick the ears off the stalk, and one or more sets of husking-rolls which receive the ears from the picking-rolls and remove the husk. My improvement consists, first, in gearing the picking-rolls together at both ends by means of spiral gears, the teeth of which are right-handed at one end and left-handed at the other end of the roll. The rolls with such spiral gears are so arranged that anything entering between the gears will be fed toward the center of the rolls, when they are turned in the proper direction. The result of this construction and arrangement of the pickingrolls is twofold. The tendency of the spiral gearing at one end of the rolls to move them endwise in contrary directions, is counterbalanced by the opposite action of the gearing at the other end of the rolls; and the centerfeed of the gearings will keep the journals and bearings clean most effectually. Second, in providing the grooved picking-rolls with one or more longitudinal ribs across the grooves to insure the pinching off of the ears, and to prevent them from being drawn between the rolls. Grooves or depressions corresponding to the longitudinal ribs are formed in the respective rolls. Third, in preventing the endwise movement of the husking rolls in response to the action of the spiral gearing connecting them, by the use of a fixed collar upon one of the rolls, and a corresponding groove, entered by such collar, upon or in the other roll.

It will be understood that the huskingrolls must permit the unobstructed discharge of the ears at one end, so that the expedient described to prevent the endwise movement of the picking-rolls cannot be employed in connection with the husking-rolls.

Figure 1 is a plan view of a corn-husker showing my improvements. Fig. 2 is a vertical longitudinal section. Fig. 3 is an elevation of the picking-rolls detached.

The same letters of reference are used in all the figures in the designation of identical parts.

The picking-rolls A and B are constructed with alternate annular grooves a and b, and collars or elevations a' and b'. In the example illustrated, each roll has one longitudinal rib, c, and one longitudinal groove or depression, c'; but more of these may be used if found desirable. The respective pairs of spiral gears A' B' have their spiral teeth run in contrary directions, as best seen in Fig. 3, for the purposes stated above. The husking-rolls C and D, arranged in inclined position at right angles to and beneath the picking-rolls, as usual, are, at their upper ends, geared together by the spiral gears C¹ D¹. The roll C is provided with a collar, C2, which runs in the groove D² in the surface of the roll D, so that no opposite endwise movement of the respective rolls can take place in consequence of the action of the spiral gears. E refers to the spikes upon the roll C, and F to the spikes upon the roll D. The spikes are arranged in spiral rows, and annular grooves e and f are formed in the surface of the rolls to let the spikes pass, and to make the contact of the rolls, thus spiked, possible.

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. The picking-rolls A B geared together at both ends by spiral gears, the teeth of which run in contrary directions at opposite ends of the rolls, substantially as and for the purposes set forth.

2. The grooved picking-rolls A B having longitudinal ribs c and corresponding grooves or depressions c', substantially as and for the

purpose specified.

3. The rolls C D geared together by spiral gears, in combination with the collar C² and groove D², substantially as and for the purpose specified.

In testimony whereof I have signed my name to the foregoing specification, in the presence of two subscribing witnesses.

PETER PHILIP.

Witnesses:

H. H. BURTON, B. EDW. J. EILS.