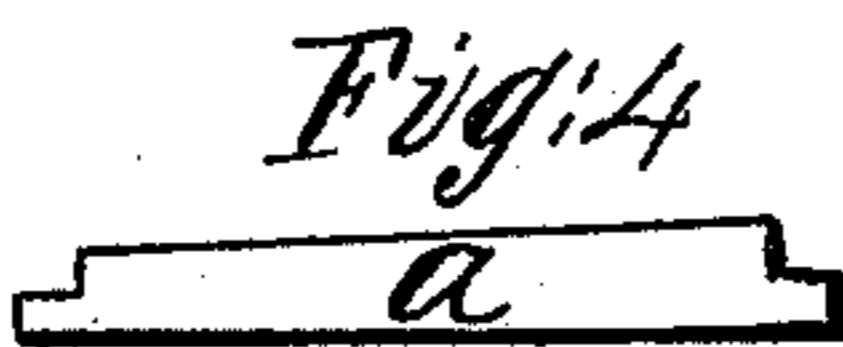
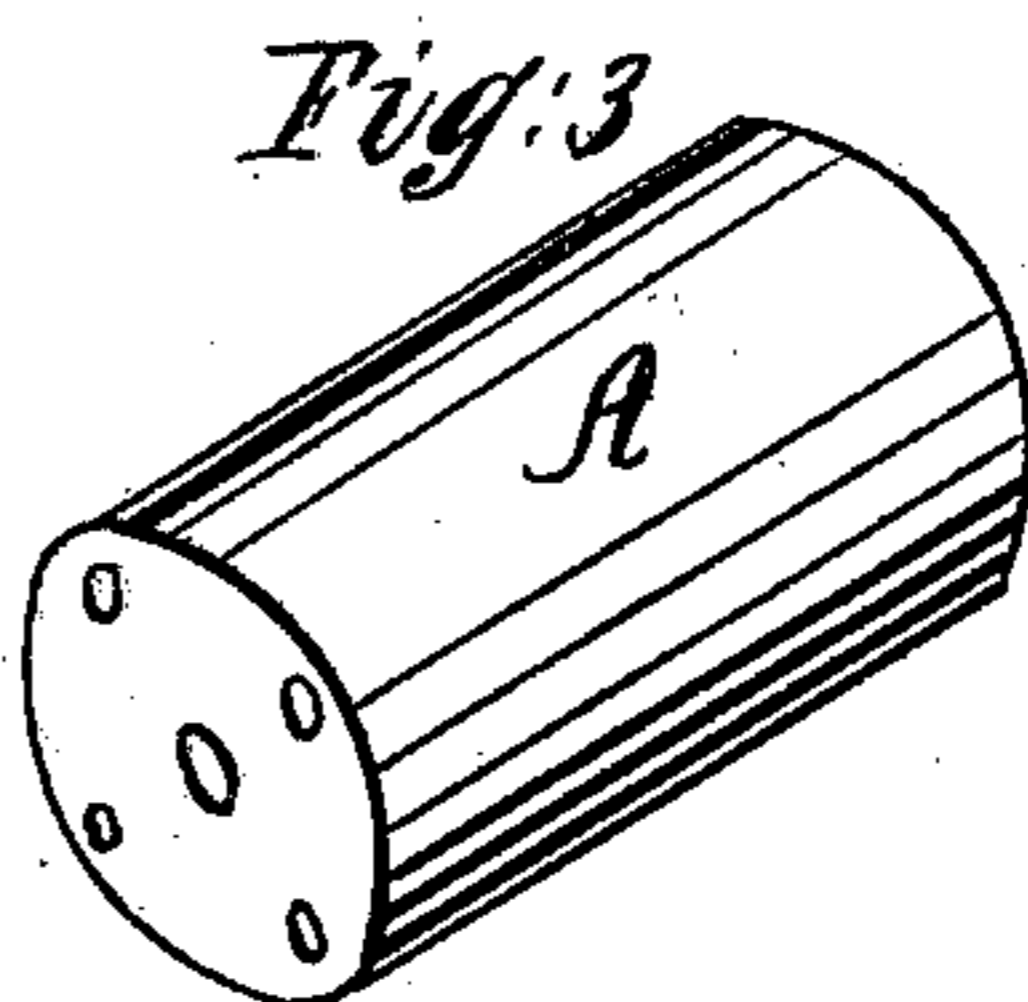
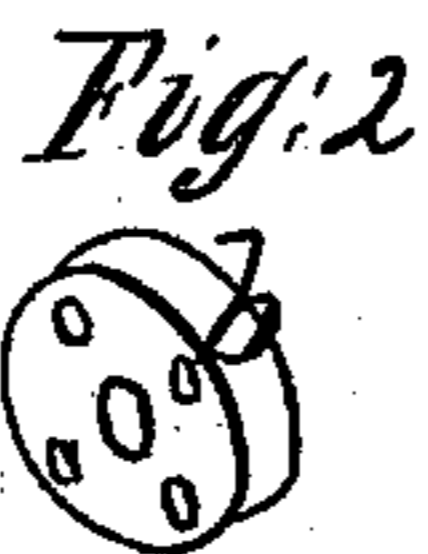
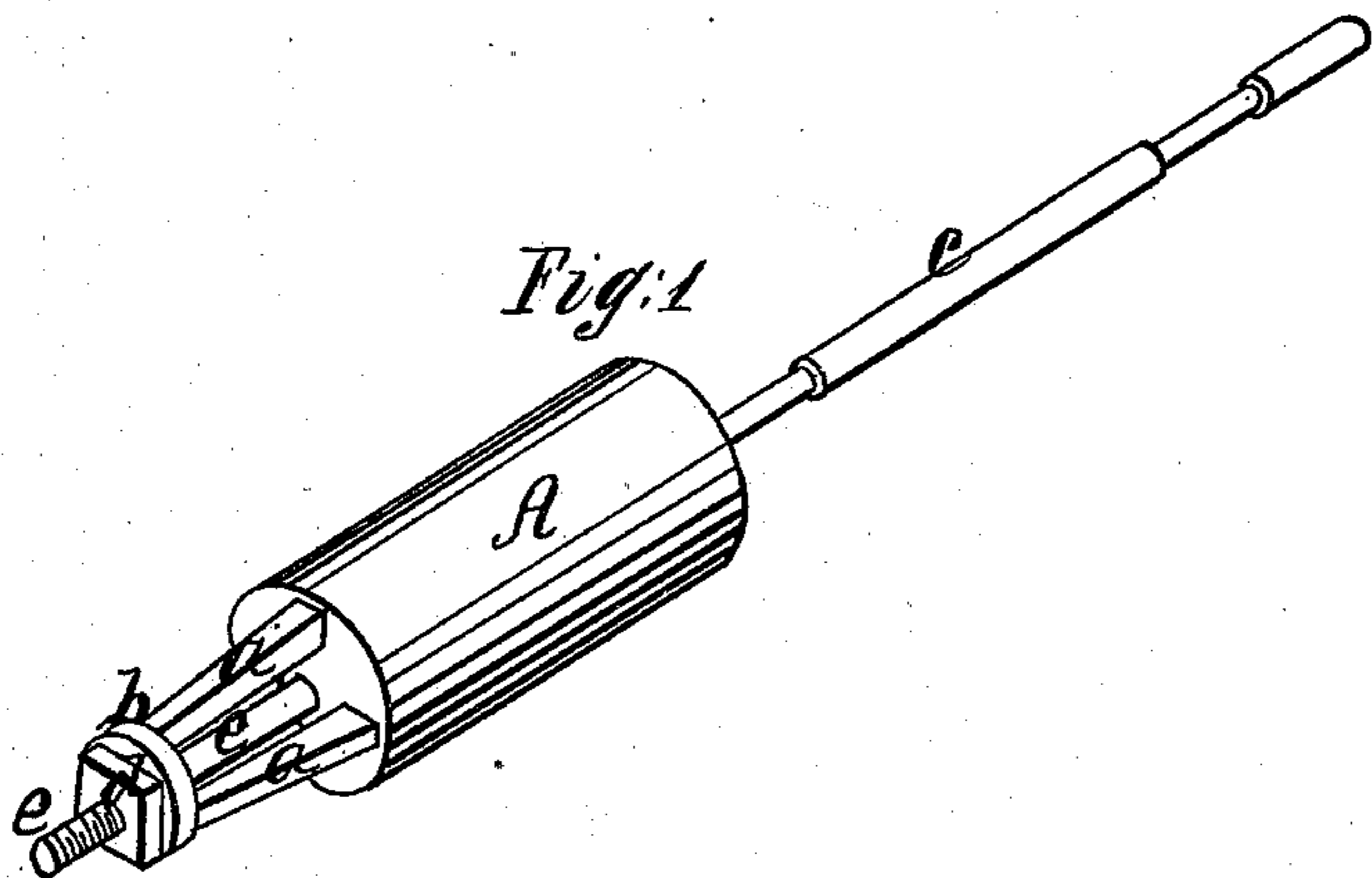


V. W. Blanchard

Machine Gearing.

Nº 87,623.

Patented Jan. 9, 1869.



Witnesses

John A. Ellis
D. W. Miller

Inventor

V. W. Blanchard
Per
J. H. Alexander
Atty.

United States Patent Office.

VIRGIL W. BLANCHARD, OF BRIDPORT, VERMONT.

Letters Patent No. 87,623, dated March 9, 1869.

IMPROVED PINION.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, VIRGIL W. BLANCHARD, of Bridport, in the county of Addison, and State of Vermont, have invented certain new and useful Improvements in Pinions; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 represents a perspective view of my pinion for harvesters, &c., and

Figures 2, 3, and 4, are views of different parts of the same.

The object of my invention is to provide a suitable pinion for harvesters or other machinery, by which the means employed in operating the same may be reduced; and to this end,

It consists in the use of a cylinder, supplied at one end with a bar, suitably constructed to be adapted to the desired part of the machine, and furnished at its opposite end with a series of bevelled bars, acting as cogs, and held thereto by an annular plate, against which fits a nut, working on a screw-thread bolt, entering the centre of the cylinder, and around which are placed the bevelled bars, or cogs.

In the accompanying drawings—

A represents the cylindrical portion of my pinion, which is supplied at one end with a bar, c, suitably constructed to be adapted to the desired part of the harvester or other machine.

a a designate a series of bevelled bars, or teeth, which

are designed to be made of steel, and reduced at their ends so as to fit into openings in the opposite end of the cylinder A, and openings in an annular plate, *b*.

This plate is securely held on the outer ends of the bars, or teeth, *a a*, by means of a nut, *d*, working on a screw-thread-cut bolt, *e*, entering the cylinder A, and to which it is firmly secured.

It will be observed that the teeth *a a* are made removable, for renewal, when required, by merely unscrewing the nut *d*, allowing the teeth to be withdrawn from the openings in the cylinder A and the openings in the annular plate *b*.

What I claim, and desire to secure by Letters Patent, is—

1. A pinion, composed of the cylindrical block A, bar, or stem, c, movable teeth *a a*, annular plate *b*, nut *d*, and screw-bolt *e*, constructed substantially as and for the purpose set forth.

2. A pinion with movable teeth, so constructed that, by means of a nut, or its equivalent, its teeth may be secured in their places, or removed when necessary, substantially as and in the manner set forth.

In testimony that I claim the foregoing as my own, I hereby affix my signature, in the presence of three witnesses.

VIRGIL W. BLANCHARD.

Witnesses:

A. E. WELLS,
E. ALLEN,
M. E. BLANCHARD.