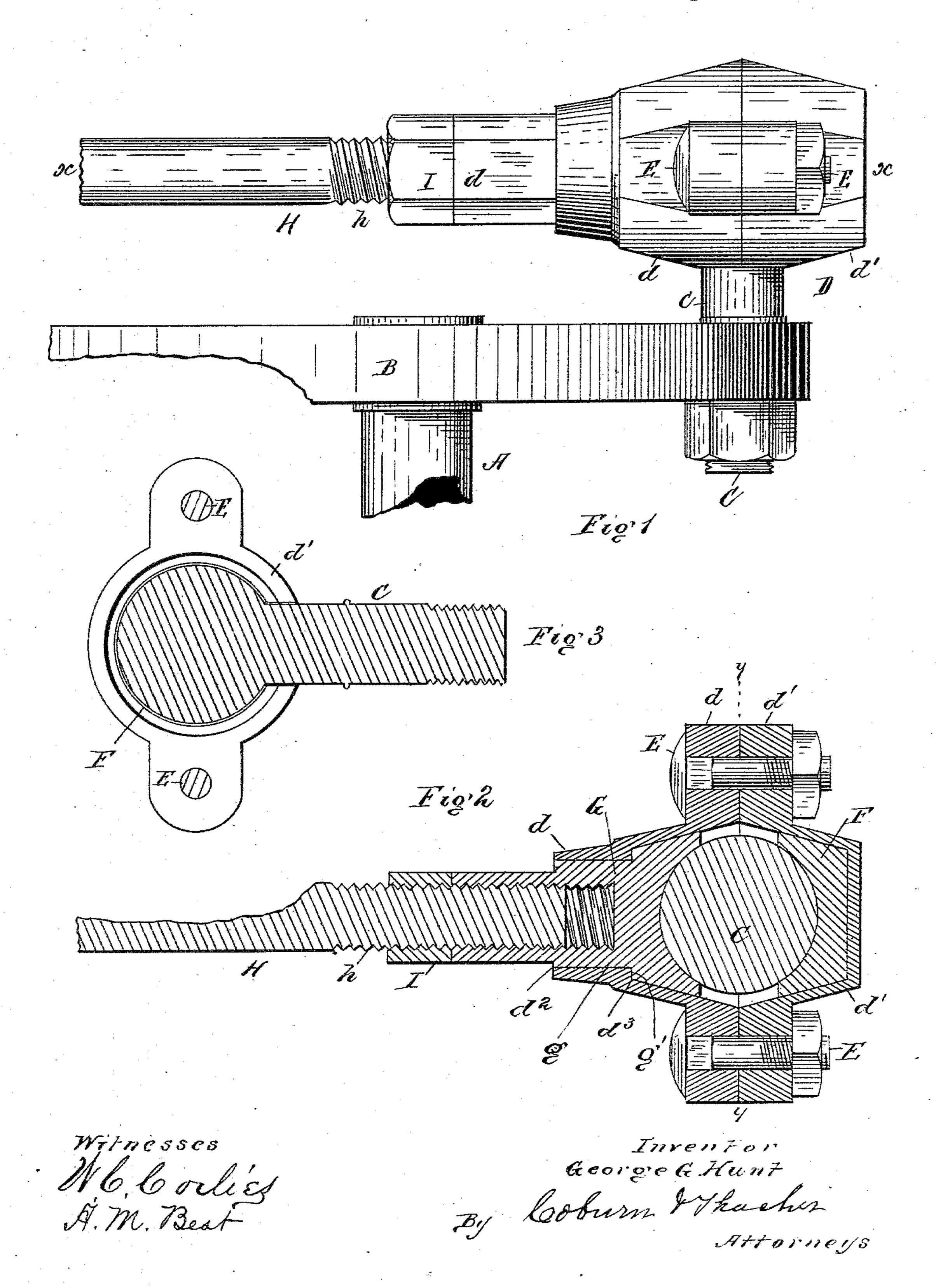
## G. G. HUNT.

## HARVESTER PITMAN.

No. 305,820.

Patented Sept. 30, 1884.



## United States Patent Office.

GEORGE G. HUNT, OF BRISTOL, ASSIGNOR OF ONE-HALF TO THE PLANO MANUFACTURING COMPANY, OF PLANO, ILLINOIS.

## HARVESTER-PITMAN.

SPECIFICATION forming part of Letters Patent No. 305,820, dated September 30, 1884.

Application filed June 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE G. HUNT, a citizen of the United States, and residing at Bristol, in the county of Kendall and State of 5 Illinois, have invented certain new and useful Improvements in Harvesting-Pitmen, which are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a plan view of a crankwheel and crank end of a pitman embodying my improvements; Fig. 2, a longitudinal section of the same, taken on the line x x, Fig. 1; and Fig. 3, a cross-section of the same, taken

15 on the line y y, Fig. 2.

My improvement relates to the construction of the pitman-connection to the crank-wheel of a harvesting-machine, the object being to provide for a rolling or oscillating movement 20 of the pitman to accommodate tilting or rocking finger-beams, which are now used in many harvesting-machines, especially mowing-machines. In machines having these tilting finger-beams the latter are rocked or oscillated, as 25 is well known, to raise and lower the guard-fingers, and a similar movement is consequently given to the cutters for purposes which are well known, and need not be stated here. It is obvious that for this movement of the cutting ap-30 paratus there must be provision either for a movement of some of the parts around the pitman or an oscillating movement of the pitman itself. I provide for the movement in the latter way.

35 I will proceed to describe in detail the construction and operation of devices by which I have carried out practically my invention in one way, and will then point out definitely in the claims the special improvements which I 40 believe to be new and wish to protect by Let-

ters Patent.

All the ordinary parts of a harvesting-machine are well known, and therefore I have not shown this machine in the drawings, and 45 shall not describe it. I have only shown and shall describe such parts as are necessary to an understanding of my invention.

In the drawings, A represents the crankshaft of a harvesting-machine, and B the crank-50 wheel, mounted in a well-known way upon the

end thereof. This crank-wheel is provided with a crank-pin, C, attached thereto, and the outer end of which is a ball, c. A case, D, is made of two parts, d d', which, when united and fastened together by bolts E or any other 55 suitable device, surround and inclose the socket-bearings F and G, which are hemispherical, and are adapted to receive the ball of the crankpin between them, as shown in Fig. 2 of the drawings, forming a socket therefor in which 60 it may turn. One part, d, of the bearing-case, which may be called the "inner section," is tubular, being somewhat longer than the other section, d', which is closed, this section d being provided with a circular opening,  $d^2$ , at its 65 outer elongated end. This opening is straight, and at the inside thereof is a shoulder,  $d^3$ , at the junction with the case proper. The main body of the case is also circular in its interior, but tapering each way from the center, giving 70 it a barrel shape, as shown in the drawings. The socket-bearing G is constructed to fit this inner section of the case, being provided with an elongated stem, g, and a shoulder, g', which abuts against the corresponding shoulder in 75 the case-section, the stem fitting nicely within the tubular opening  $d^2$ . This stem is longer than the tubular end of the case-section, so that it projects some distance beyond the latter, as shown in Fig. 2 of the drawings, and it is bored 80 out and threaded, so as to provide a threaded socket. The pitman H is a rod of ordinary form, and at its crank end has a threaded section, h, which is adapted to be secured into the threaded socket of the socket-piece G. A jam-85 nut, I, is placed on this threaded end of the pitman, whereby the pitman may be adjusted in its socket and fastened in its position whenever the adjustment is made. It will be understood, of course, that the other end of the 90 pitman is connected to the end of the cutterbar of the harvesting-machine in any ordinary way. It will be seen from this description that the pitman-head is composed of a divided case, which incloses and holds the pitman-box, which 95 is also divided, and that the joint between the crank-pin and pitman-head has a ball-andsocket joint, which permits freedom of motion. It will also be noticed that one part or socketpiece of the pitman-box is swiveled within the 100 inclosing-case, and that, the pitman being fastened to this part of the box, it constitutes a swivel-piece for the pitman, permitting it to have an oscillating movement to accommodate

5 the tilting of the cutting apparatus.

There may be some modifications in the construction of some of the parts described and shown herein without departing from the main idea of my invention and the mode of operation which I have set forth above; hence I do not wish to be understood as limiting myself in every particular to the details of construction specified above.

Having thus described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. In a harvester-pitman, an inclosing-case, in combination with a swivel-piece mounted

in the case, and the pitman connected to the swivel-piece, substantially as and for the pur- 20

poses set forth.

2. The ball crank-pin, in combination with the box-bearings F and G, the latter of which is swiveled to its support, and the pitman connected to the swiveling bearing, substantially 25 as and for the purposes set forth.

3. The ball crank-pin, in combination with the inclosing-case D, the box-bearings F and G, and the pitman H, all constructed and operating substantially as and for the purposes 30

set forth.

GEORGE G. HUNT.

Witnesses:

W. C. CORLIES, THOMAS H. PEASE.