

No. 666,471.

Patented Jan. 22, 1901.

O. C. & M. A. COX.
COMBINATION SEED PLANTER AND CULTIVATOR.

(Application filed July 17, 1900.)

No Model.)

2 Sheets—Sheet 1.

Fig. 1.

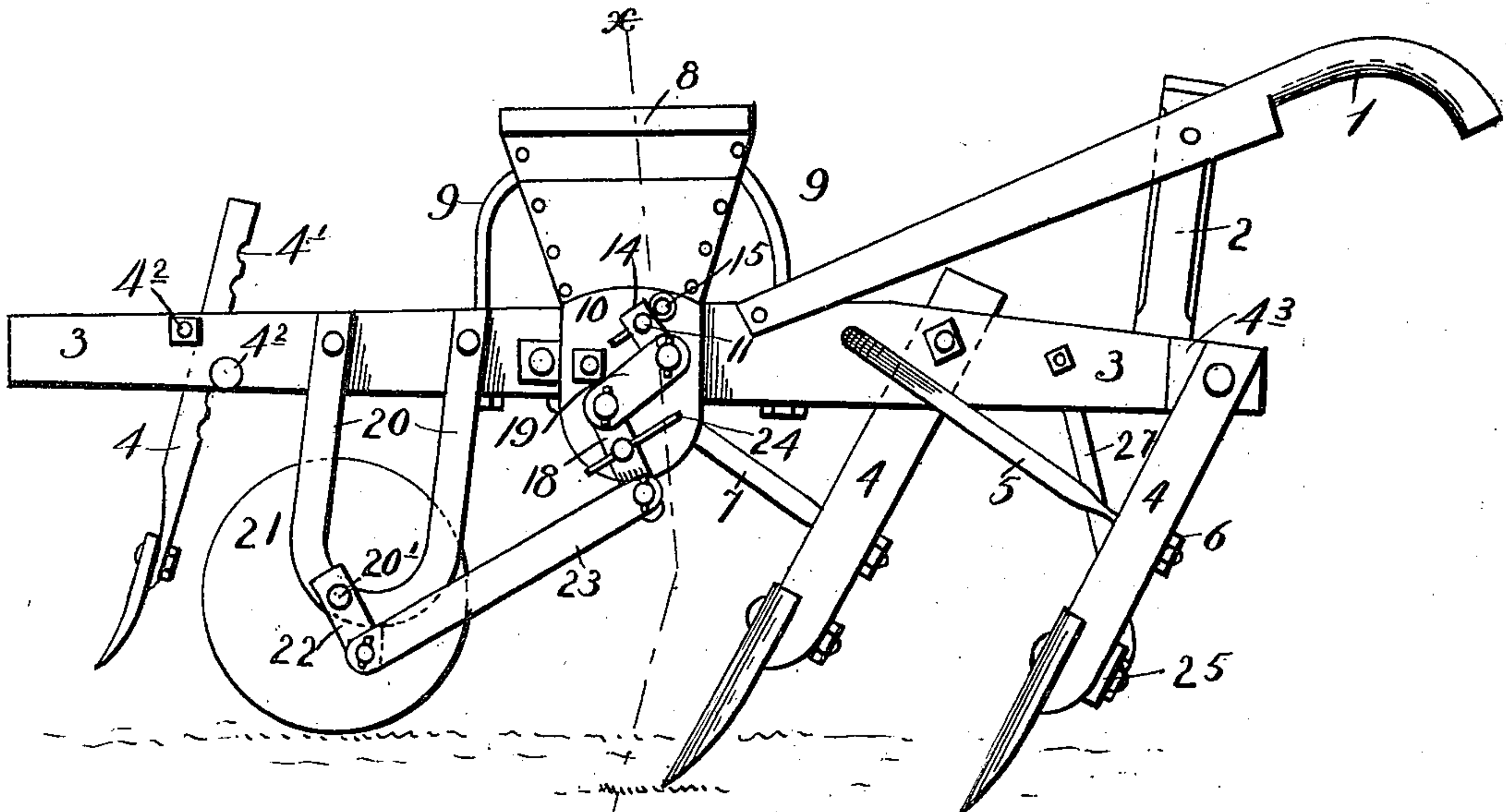


Fig. 2.

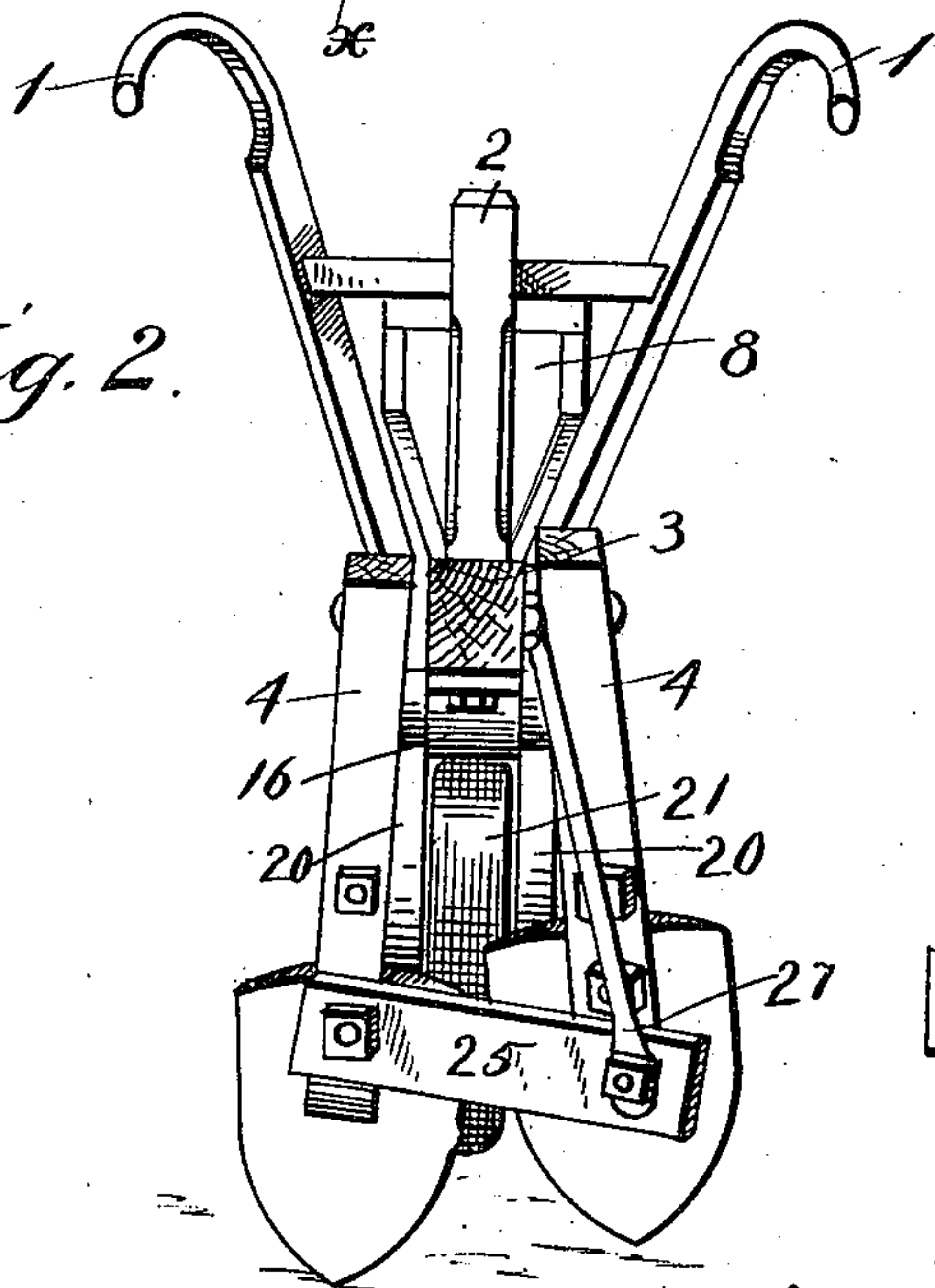
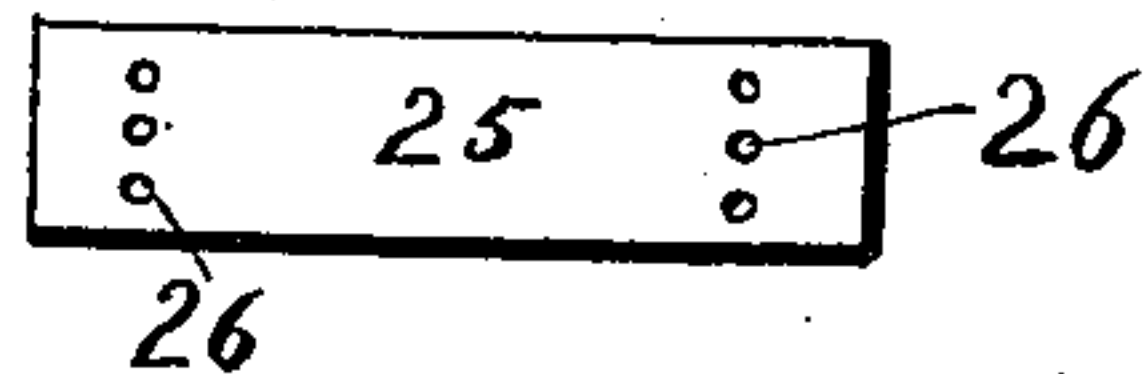


Fig. 6.



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Fig. 3.

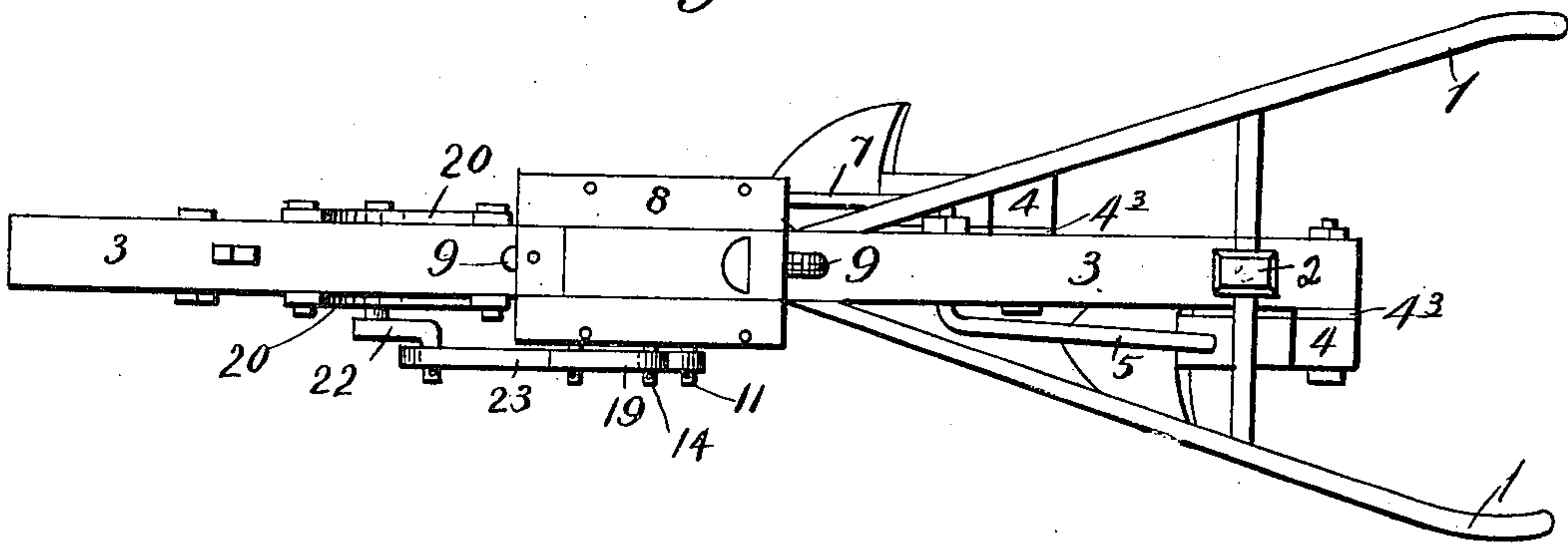


Fig. 4.

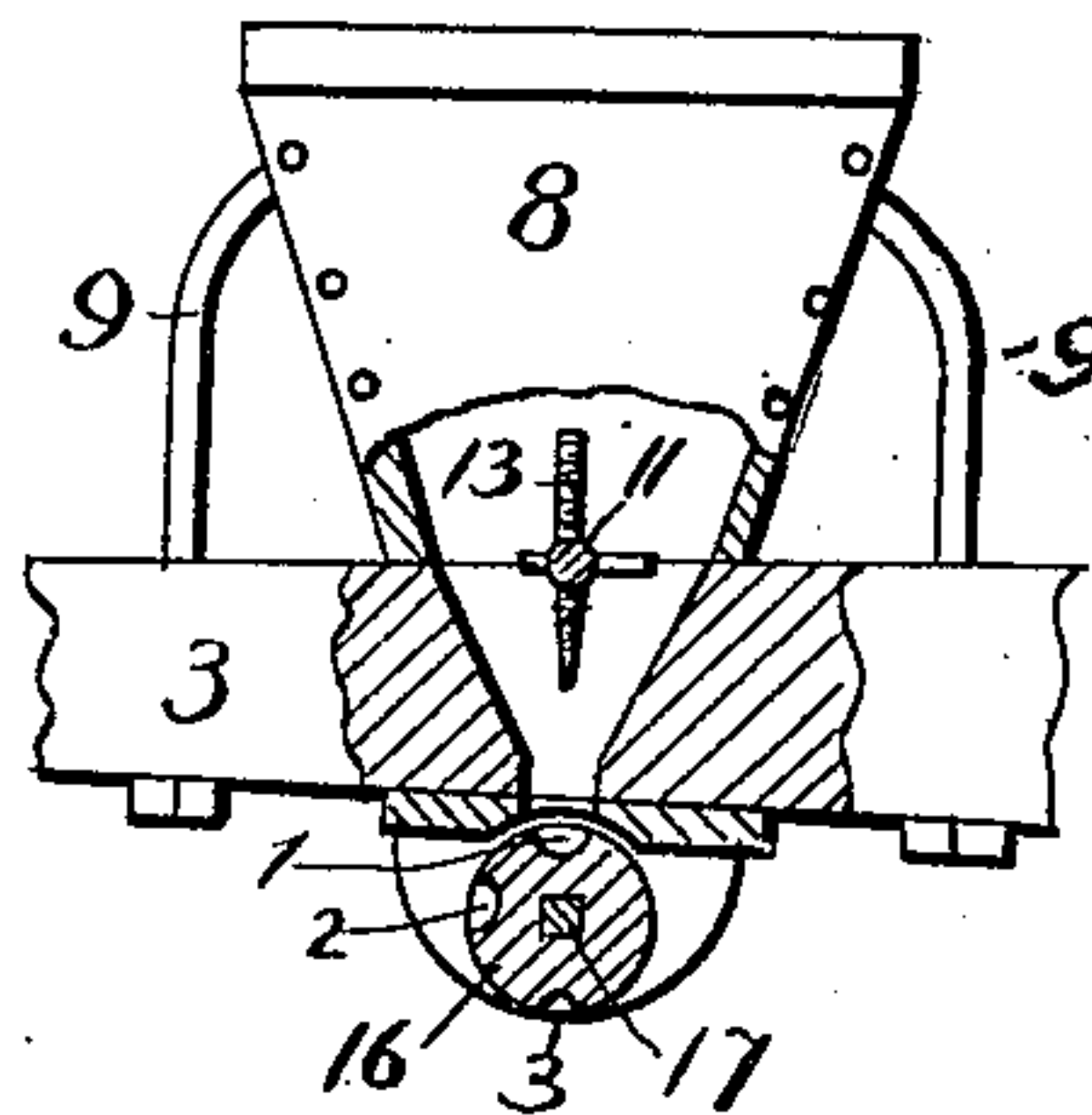
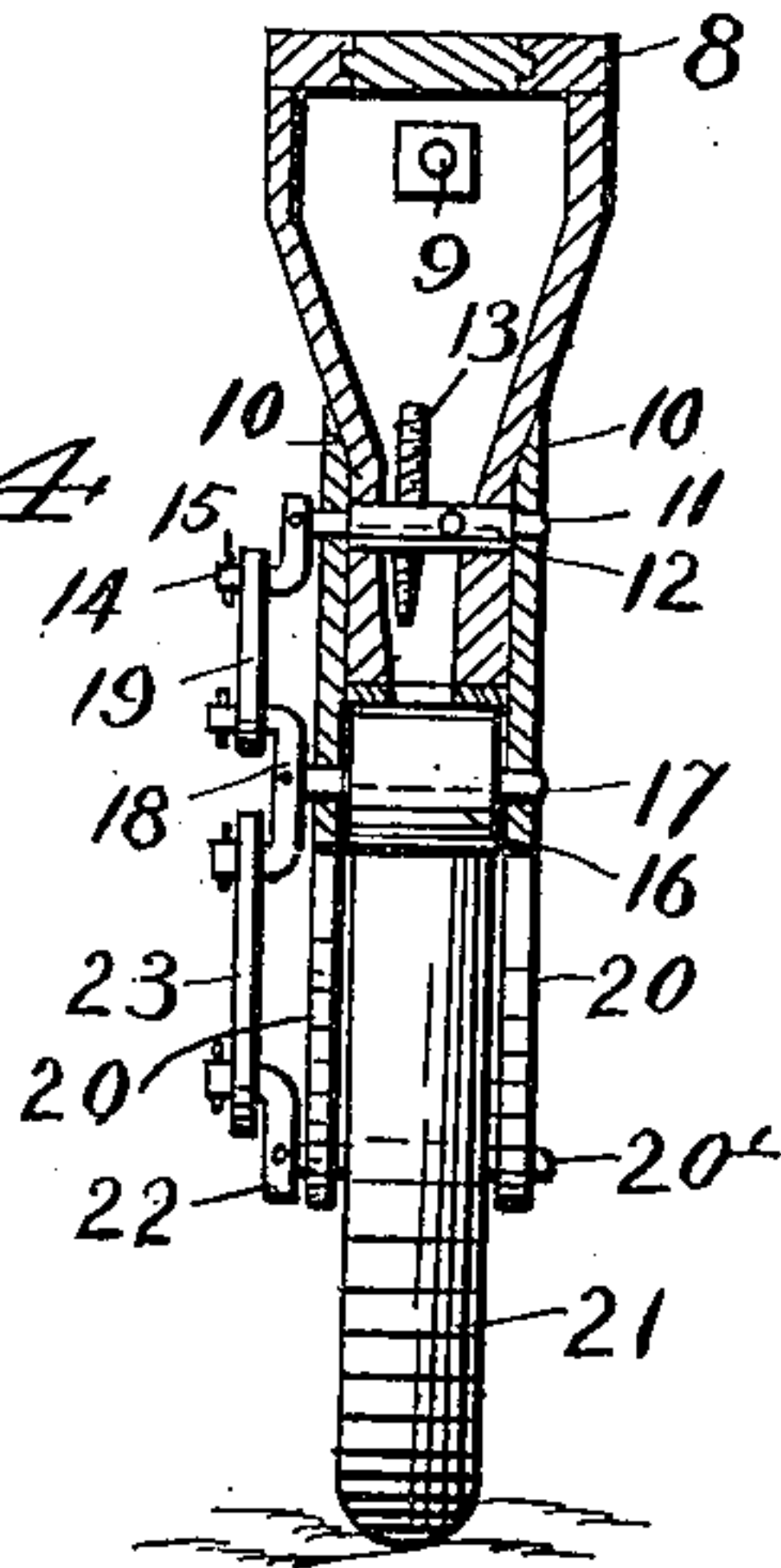


Fig. 5.

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ORRIE CLARENCE COX AND MARGARET ANN COX, OF GILLSBURG,
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COMBINATION SEED-PLANTER AND CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 666,471, dated January 22, 1901.

Application filed July 17, 1900. Serial No. 23,912. (No model.)

To all whom it may concern:

Be it known that we, ORRIE CLARENCE COX and MARGARET ANN COX, citizens of the United States, residing at Gillsburg, in the county of Amite and State of Mississippi, have invented certain new and useful Improvements in Combination Seeders, Planters, and Cultivators for the Planting and Cultivation of Corn, Peas, Peanuts, or other Farm Products; and we 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 make and use the same.

Our invention is a combination seeder, planter, and cultivator; and it consists in a novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a side elevation of our invention. Fig. 2 is a rear elevation. Fig. 3 is a top plan view. Fig. 4 is a cross-sectional view of Fig. 1 on the line X X looking from the rear. Fig. 5 is a detailed view showing the hopper and main beam partly cut away, showing the inside mechanism. Fig. 6 is a rear face view of the scraper-board.

Our invention is described as follows:

1 represents the handles; 2, the standard that supports the handles; 3, the beam, and 4 the plow-standards, one pivoted on the left-hand side of the beam and secured by a brace 5, the front end of which passes through the beam and is secured on the opposite side by a nut, the rear end of said brace passing through the plow-standard and is secured by a nut 6. This makes this plow-standard adjustable—that is, it may be given more or less pitch forward or backward. The other standard is pivoted to the right-hand side of the beam and is secured and made adjustable by a brace 7 in the same way as the plow-standard just described is made adjustable by brace 5. Between the upper end and inner face of each of the plow-standards 4 and the outer faces of the beam 3 are secured wedge-shaped washers 4³, so that by turning the thin part of the washer upward and the thick part of the washer downward we may spread the lower ends of the standards, or by turning the

thick part of the washer up and the thin part of the washer down we may contract the distance between the lower ends of the plow-standards, and thus these plow-standards are adjustable in four directions—in and out, forward and backward. On the top of the beam and in front of these two standards is a hopper 8, secured in place by two bow-braces 9. Extending from the bottom of the hopper and secured on each side of the beam 3 are plates 10. These plates are perforated to receive axles, hereinafter described.

Through the plates 10 and near the upper edges thereof are perforations 11, and in these perforations works a shaft 12. This shaft has through it threaded perforations, and in these perforations are screwed two or more threaded rods 13. These perforations just mentioned and these rods 13 are threaded, so that they may be adjusted—that is, one end may be made longer or shorter—so that it may properly stir and keep in motion the seeds that are put into the hopper, some seeds requiring more manipulation than others. One end of this shaft 11 is secured to a crank-arm 14 by means of a bolt 15. Immediately under this shaft 11 is journaled a cylinder 16, having in its periphery three seed-cups 1, 2, and 3, and running through the center of this cylinder is a shaft 17, and secured to one end of this shaft is a double crank-arm 18, one end of which is connected to the crank-arm 14 by means of a toggle-lever 19.

In front of the hopper are secured two U-shaped bearings 20, in the lower ends of which is journaled a wheel 21, and to one end of the shaft 20' of said wheel is secured a crank-arm 22. The free end of this crank-arm 22 is connected to the lower end of the double crank-arm 18 by means of a toggle-lever 23. This toggle-lever is secured to the end of the axle 17 by means of a pin 24.

The front plow-standard 4 is provided on its rear edge with notches 4', so that it may be adjusted upward or downward, and is held to said adjustment by bolts and nuts 4², one in front and the other in the rear of said plow-standard, and to the lower end of this standard is secured a plow-point, and to the lower ends of the rear standards are also se-

cured plow-points. These plow-points may be removed or replaced by any kind of plow-points, so that instead of using this invention simply for opening rows, dropping seed, and covering them up it also may be used as a cultivator or for plowing the soil in various ways. When we do not wish to use the invention as a planter, we remove the dropping devices.

10 To the rear face of the plow-standard 4 may be bolted one end of a scraper-board 25, having in each end three or more perforations 26, one above the other, so that the board may be adjusted upwardly or downwardly, 15 and to the free end of the said board is bolted one end of a brace 27, the other end being bolted to the beam 3.

The wheel 21 is about twelve inches in diameter, so at one turn it moves the seeder 20 forward about three feet, and as it ordinarily drops one or more grains at one turn the hills are about three feet apart. When the feed-cylinder 16 is placed on its shaft 17 in the position as shown in the drawings, it drops 25 seed every eighteen inches. For instance, as the wheel 21 revolves, the toggle-lever 23 moves the double crank-arm 18 back and forth, and this turns the cups 1 and 2, first one and then the other, under the hopper, and 30 cup 1 throws the seed down by the rear of the cylinder and 2 throws the seed down in front of the cylinder. Thus we have a hill every eighteen inches; but when we wish to drop seed only every three feet we remove the pin 35 24 and turn the cylinder one-half way around, thus placing cup 3 under the dropping device, and as the cylinder moves forward it drops the seed from cup 3, and as this cup 3 moves back it is filled again, and so on, dropping seed every three feet. Thus by the simple operation of removing the pin 24 and turning the cylinder 16 half around we may drop 40 seeds every eighteen or every thirty-six inches.

Having described our invention, what we

claim as new, and desire to secure by Letters Patent, is—

1. In a seeder, planter and cultivator, the combination of a main beam 3; plow-standards 4, pivoted to the front and rear ends thereof; adjustable braces 5 and 7, and wedge-shaped washers 4³, for adjusting said standards; a hopper 8, secured on and midway of said beam by perforated plates 10; a shaft 11, journaled in the upper end of said plates provided with threaded perforations adapted 55 to receive the arms 13; a cylinder 16, journaled immediately below said shaft and provided with seed-cups 1, 2 and 3; a wheel journaled to and below the beam and in front of the hopper; said cylinder 16, and shaft 11, 60 being operated by said wheel, crank-arms and levers, substantially as shown and described and for the purposes set forth.

2. In a combination seeder, planter and cultivator, a hopper 8, mounted on top and 65 midway the beam; perforated plates secured under the hopper and to either side of the beam; a perforated shaft journaled in the upper part of said plates; adjustable and threaded arms screwed into the perforations 70 in said shaft; a cylinder journaled in said plates and having seed-cups 1 and 2, near each other, and a seed-cup 3, opposite the cups 1 and 2; a wheel journaled below said beam, and in front of said hopper and adapted 75 to operate said cylinder and shaft by suitable levers and crank-arms, substantially as shown and described and for the purposes set forth.

In testimony whereof we affix our signatures, in presence of three witnesses, this 31st day of May, 1900.

ORRIE CLARENCE COX.
MARGARET ANN COX.

Witnesses:

J. M. CARRUTH,
C. J. COLE,
WM. C. PIPKIN.