No. 675,655.

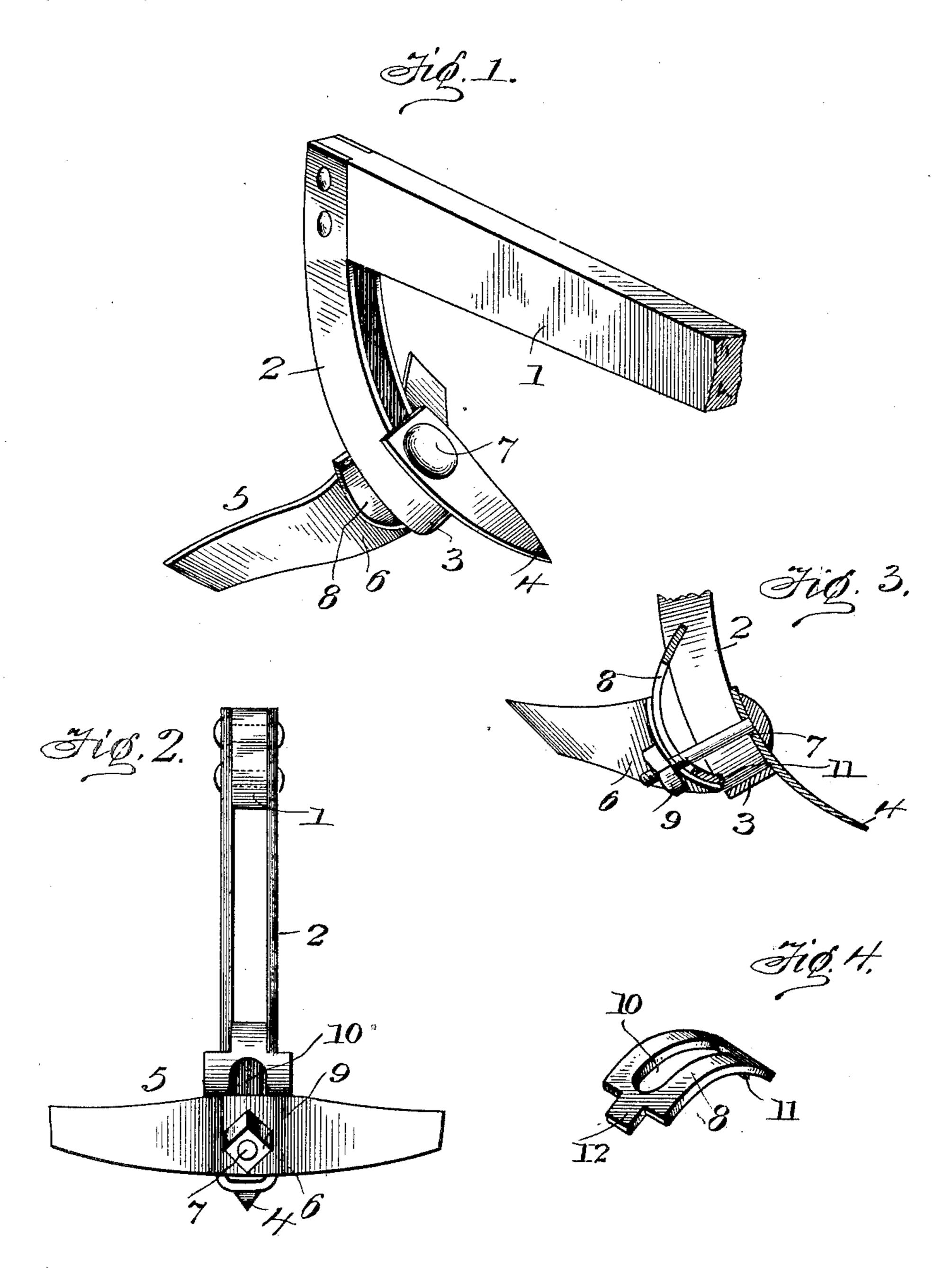
Patented June 4, 1901.

## N. C. HARRIS.

## ADJUSTABLE HEEL SCRAPER FOR PLOWS.

(Application filed Nov. 8, 1900.)

(No Model.)



Inventor

Newton C. Harris

Attorneys

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Witnesses

## UNITED STATES PATENT OFFICE.

NEWTON CHESTER HARRIS, OF KNIGHTS, ALABAMA.

## ADJUSTABLE HEEL-SCRAPER FOR PLOWS.

SPECIFICATION forming part of Letters Patent No. 675,655, dated June 4, 1901.

Application filed November 8, 1900. Serial No. 35,827. (No model.)

To all whom it may concern:

Be it known that I, NEWTON CHESTER HAR-RIS, a citizen of the United States, residing at Knights, in the county of Coosa and State 5 of Alabama, have invented certain new and useful Improvements in Adjustable Heel-Scrapers for Plows; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others ro skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in adjustable heel-scrapers for plows; and its object is to provide an adjusting device which 15 is simple in construction, convenient in operation, and adapted to hold the scraper firmly in adjusted position.

The invention consists in certain novel features of construction, combination, and ar-20 rangement of parts, as will be hereinafter shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a plow em-25 bodying my invention. Fig. 2 is a rear elevation of the same. Fig. 3 is a detail sectional view through the lower end of the plowstandard, the scraper, and adjusting-plate. Fig. 4 is a detail perspective view of the ad-30 justing-plate.

Referring now more particularly to the drawings, the numeral 1 represents a plowstock of the ordinary or any approved construction, and 2 the slotted standard thereof, 35 which is shown in the present instance consisting of a metallic strap doubled upon itself to form opposite side arms which embrace the plow-beam and a closed lower end or return portion 3, bridging the slot between said arms.

4 represents a plow share or point of any approved type, 5 a winged scraper provided with a curved body portion 6, and 7 a securingbolt.

The bolt 7 is passed through the slot of the 45 standard, and its head bears against the plow point or share, while its shank extends through the curved body portion of the scraper and through an adjusting-plate 8, interposed between the same and the scraper. 50 The scraper is held in place by a nut 9, fitted on the threaded end of the shank of the bolt and bears upon the rear side of the body por-

tion of the scraper to hold the same pressed against the adjusting-plate. The adjustingplate is concavo-convex in form and provided 55 with a longitudinal slot 10, through which the shank of the bolt passes. The concave side of this adjusting-plate faces the rear side of the plow-standard and its upper and lower edges bear thereupon, and to retain said plate 60 against lateral and vertical movement it is provided at its lower end with a lug 11, adapted to engage the lower end or return portion of the standard to limit the downward movement of the adjusting-plate, and at its upper 65 end with a tongue 12, which holds said adjusting-plate against sidewise movement. The rear convex face of the adjusting-plate forms a seat for the curved body portion of the scraper, which conforms thereto and is 70 adapted to be held in engagement therewith by the nut 9. The bolt 7 is adapted when the more fully described and claimed, and is | nut is loosened up to move freely in the slot of the adjusting-plate, so that the scraper may be adjusted up or down, according to the 75 character of the work to be done, to throw more or less dirt on the plants. It will be seen that when the scraper is moved in either direction the body portion thereof will conform to the curvature of the adjusting-plate, 80 so that it will bind tightly thereagainst when the nut is tightened.

> The operation of adjusting the scraper will be readily understood from the foregoing description, and it will be seen that, owing to 85 the curvature of the plate, the set or inclined position of said scraper is always preserved, whether adjusted to the limit of its upward or downward movement. By making the adjusting-plate concavo-convex in form and of 90 resilient metal a further advantage is obtained, in that the spring or resilient action of the plate will tend to bind the head of the bolt tightly against the plow share or point and the scraper against the nut, thus securely 95 binding the parts together. It will of course be understood that the particular construction of the standard is not essential, as the slot for the passage of the bolt and the reception of the lug or tongue of the adjusting- rec plate may be formed otherwise than by doubling a metallic strap, as shown in the present instance.

Having thus described my invention, what

I claim, and desire to secure by Letters Pat-

ent, is—

1. In an adjustable heel-scraper for plows, the combination with a plow-standard, of a 5 heel-scraper provided with a curved body portion, a concavo-convex adjusting-plate arranged between said body portion and the standard and having its convex side facing outwardly and forming a seat for said body 10 portion, and a bolt passed through the standard, scraper and slot in the adjusting-plate,

substantially as set forth.

2. In an adjustable heel-scraper for plows, the combination with a slotted standard, of 15 a heel-scraper, a concavo-convex adjustingplate having its concaved side facing the standard and interposed between the same and scraper, said plate being provided with a longitudinal slot and engaging devices at 20 its upper and lower ends to fit within the slot or slots of the standard, and a securing-bolt passed through the standard, scraper and slot

in the adjusting-plate, substantially as set forth.

3. In an adjustable heel-scraper for plows, 25 the combination with a slotted standard comprising a metallic strap doubled upon itself, a heel-scraper having a curved body portion, a concavo-convex adjusting-plate interposed between the scraper and standard and hav- 30 ing its concaved side bearing against the standard, said plate being provided with a slot and projections to enter the slot of the standard, and a securing-bolt passed through the slot of the standard and slot of the ad- 35 justing-plate to hold the parts connected, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-

nesses.

NEWTON CHESTER HARRIS.

Witnesses:

J. A. MILLER, R. M. GLENN.