

(No Model.)

G. W. WILSON.
CULTIVATOR.

No. 314,094.

Patented Mar. 17, 1885.

Fig. 1.

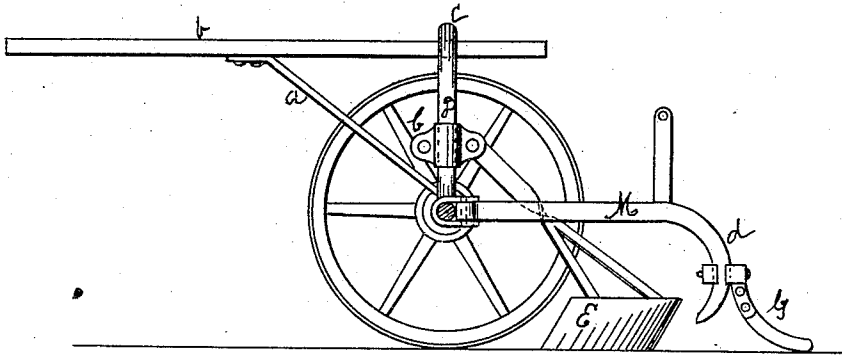


Fig. 4.

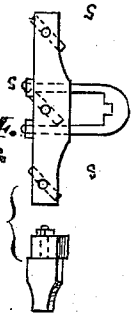


Fig. 2.

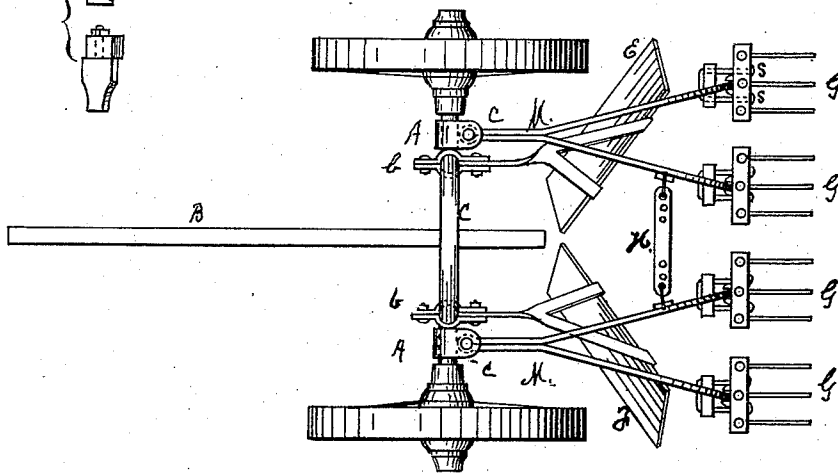
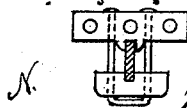


Fig. 3.



Witnesses:

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per Alexander H. ...

Attorney.

UNITED STATES PATENT OFFICE.

GEORGE W. WILSON, OF MURDOCK, ILLINOIS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 314,094, dated March 17, 1885.

Application filed November 22, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WILSON, a citizen of the United States, residing at Murdock, in the county of Douglas, in the State of Illinois, have invented a new, useful, and important Improvement in Cultivators, of which the following description will be sufficient in law.

My invention relates to the adjustability of the working parts.

In the drawings, Figure 1 is a side elevation of a combined cultivator and harrow with the front wheel removed. Fig. 2 is a plan view of the same; Fig. 3, a detail view of the clamp for adjustment of the harrow-teeth; Fig. 4, a modification of the harrow-teeth and clamp.

The axle A is arched or bow-shaped for its middle portion. The draft-pole B is attached to the top of the arch C, and has proper braces, *a*, extending to each side of the arch, where they are fastened to the axle. The object of the arch is to gain two uprights, D, (only one upright being shown in the drawings,) for securing by clamps *b* the two wings E F of the cultivator. Similar clamps, *c*, secure to the axle upon each side of the arch a bifurcated or Y-shaped arm, M, for holding the harrow-teeth. The outward portions *d* of this arm are bent downward to admit of vertical adjustment of the harrow-teeth G. These teeth are arranged in sets, there being two sets on each side of the arch, and the distance between each set is lengthened and shortened by an adjusting-lever, H. Each set of harrow-teeth is adjusted upon its supporting-arm by means of an ordinary screw-clamp, N, of clevis shape, held fast in any position by tightening-nuts *ss*. The harrow-teeth, instead of being curved, as in Fig. 1, may be straight and flat, as in Fig. 4. In the latter case, by turning the vertical teeth side-wise or at an angle, the furrows may be widened. A flat tooth is sharpened at the

top, and the edge made is inserted into a groove under its supporting-bar. A tightening-nut then holds the tooth in place when set at any angle.

Without further explanation it is obvious that a quick adjustment of the cultivator-wings and the harrow-teeth is a principal feature in this invention.

Among others the following advantages will result from this construction of a cultivator and harrow: It will plow very close to young corn without disturbing the roots. It is very effectual in destroying young weeds. It is an excellent pulverizer of the soil, doing the work of harrow and cultivator at one operation. It will make a gradual sloping ridge from either side to the middle of the row, working all the ground between the rows. It is an excellent farming implement for working cane and broom-corn.

I am aware that an arched axle is well known in the art, and that harrowing-teeth have been made to follow scrapers. In my device I deem it important that the harrow be hung upon the horizontal arm of the axle to give free vertical play, and that the scrapers be hung upon the vertical arms to allow horizontal movement.

What I claim is—

In a wheel-cultivator, the combination, with the arched axle, of the bifurcated frames M, secured to the horizontal arms of such axle, and having cross-bars and knives or teeth G, the scrapers E F in front of said knives and secured by branched arms to the vertical arms of the axle, and the adjusting-bar H, substantially as shown and described.

In testimony whereof I hereunto set my hand, in presence of two attesting witnesses, this 8th day of November, A. D. 1884.

GEORGE W. WILSON.

Witnesses:

JOHN N. OUTCELT,
W. R. BROWN.