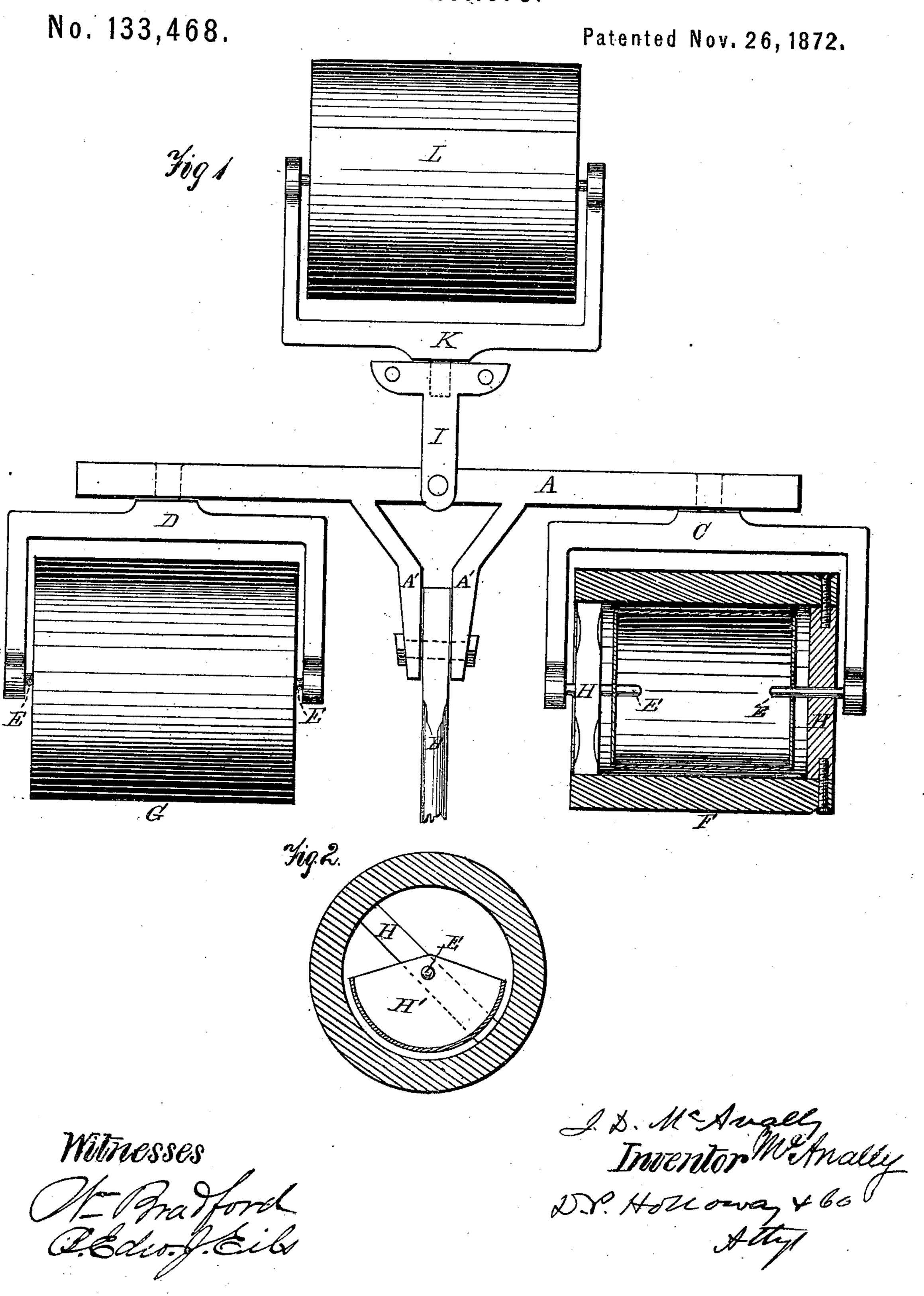
J. D. McANALLY. Land-Rollers.



UNITED STATES PATENT OFFICE.

JAMES D. MCANALLY, OF WATERLOO, INDIANA.

IMPROVEMENT IN LAND-ROLLERS.

Specification forming part of Letters Patent No. 133,468, dated November 26, 1872.

To all whom it may concern:
Be it known that I, JAMES D. MCANALLY, residing at Waterloo, in the county of De Kalb and State of Indiana, have invented certain new and useful Improvements in Land-Rollers, of which the following is a specification:

Figure 1 is a plan view, partly in section, of my improved roller, showing the position of the adjustable rollers, the beam to which they are attached, the yokes in which they are journaled, and, in the sectional portion thereof, the weight-receptacle; and Fig. 2, a a vertical transverse section of one of the rollers, showing the weight-receptacle therein and the shaft to which it is suspended.

Corresponding letters refer to corresponding

parts in both of the figures.

This invention relates to rollers which are used for rolling fields after they have been plowed, roads the surface of which it is desirable to make smooth, and for other similar purposes; and it consists in the construction, combination, and arrangement of some of its parts, as will be more fully explained hereinafter.

In constructing rollers of this character I use a beam, A, to which the tongue B is attached, there being two arms, A' A', projecting from the beam A for that purpose. Outside of the tongue B, and near the ends of beam A, two yokes, C and D, are pivoted by a shank which projects from their outer surfaces, which projections pass through sockets or holes formed in said beam, and rotate therein in such a manner that the outer ends of said yokes are free to rise and fall, in order to permit the ends of the rollers which they carry to pass over any obstruction with which either of their ends may come in contact without raising the whole roller from the ground. These yokes extend outward from their pivotal points in a line with the beam A for a distance sufficient to permit their arms which project from them at a right angle to pass over the ends of the rollers to or a little past the centers of which they extend, where they are provided with journals or shafts E E, upon which the rollers turn. The rollers F and G are supplied at each of their ends with a cross-bar, H, through which the journals or shafts E pass. These journals may be constructed as shown in Fig. 1, or their shafts may extend the entire length of the yokes, as desired. To the journals or

shafts E, and within the rollers F and G, there is suspended a weight-receptacle, H', in such a manner that it remains stationary while the rollers are revolving, it being for the purpose of receiving and carrying additional weights which may be inserted therein when the ground is so uneven or hard as to require it, but which may be readily removed when the machine is to be used upon ground where a less amount of weight is required, or where the weight of the machine alone is sufficient.

These receptacles may be made of cast or of sheet metal, their ends being provided with heads for preventing the weights from falling out, and also for furnishing the means for suspending them to the journals or shafts of the rollers, which may be made of iron, either cast or wrought, or they may be made of

wood and hooped with iron.

To the beam A there is pivoted a yoke or arm, I, which has a movement in the arc of a circle in the same plane as that occupied by the bar A. To the rear end of this arm there is pivoted a yoke, K, in all respects like those above described, it being so arranged that its ends and the ends of the collar L, which it carries, can rise and fall, as above described, and for the same purpose. This last-named roller is provided with a weight-receptacle like the others, and it is so arranged as to cover or roll upon that portion of the ground over which the machine passes which is not touched by the forward rollers, and its double motion is given to it in order that it may facilitate the turning of the machine, whether it is being moved forward or backward, and that it may not leave any portion of ground untouched by the machine.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

In a land-roller, the combination of the open-ended rollers F, G, and L, yokes C, D, and K, suspended weight-receptacles H', and swiveled connection I, the parts being arranged substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES D. MCANALLY.

Witnesses:

WILMER BRADFORD, B. Edw. J. Eils.