(No Model.) 2 Sheets—Sheet 1.

A. TAUFFLIEB & V. CHAUSSARD.

WHEELBARROW.

No. 524,917. Patented Aug. 21, 1894.

FIG_1_

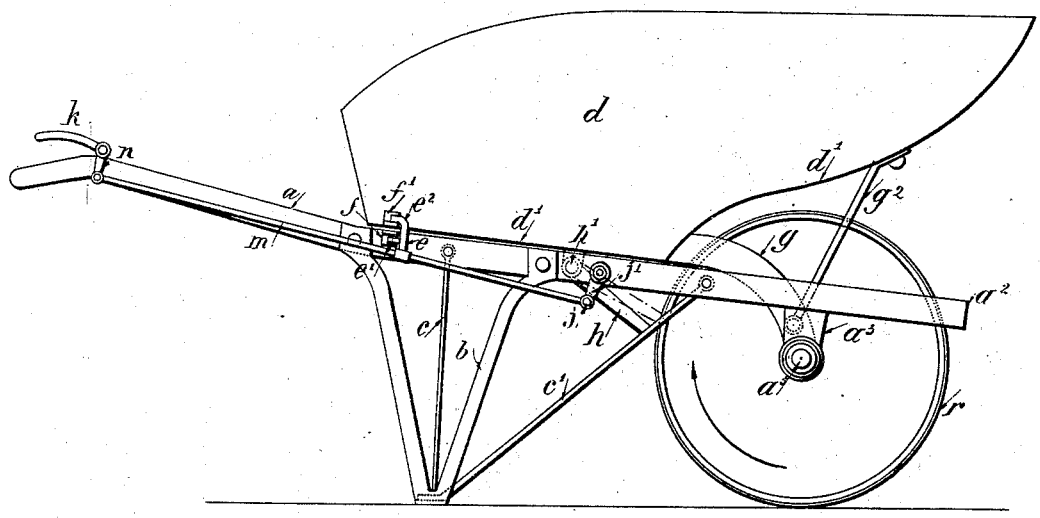
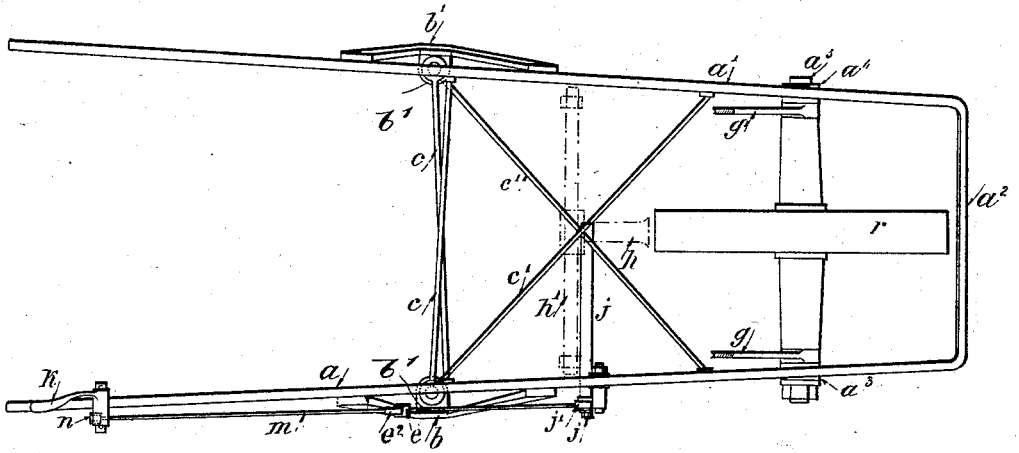


FIG_2_



WITNESSES.

E. M. McKay

J. L. M. Sheliffs

INVENTOR:

A. Taufflieb

BY V. Chaussard

Munn & Co

ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2.

A. TAUFFLIEB & V. CHAUSSARD.

WHEELBARROW.

No. 524,917 Patented Aug. 21, 1894.

FIG_3_

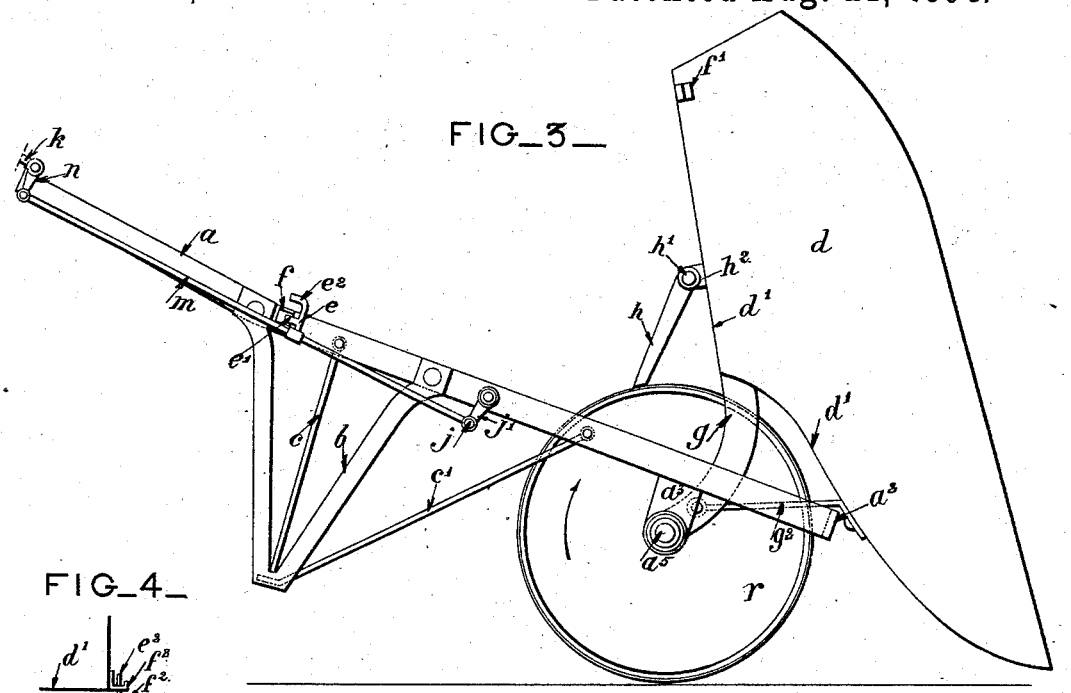


FIG_4_

FIG_5_

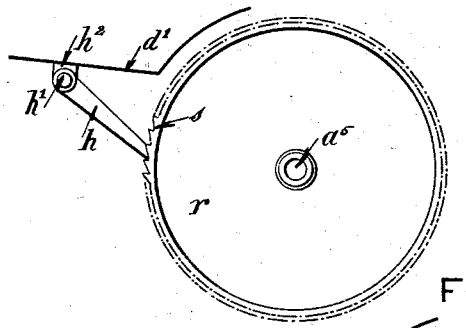


FIG_6_

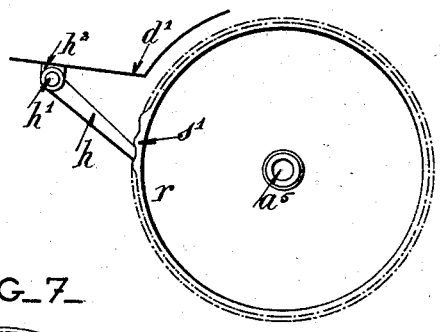
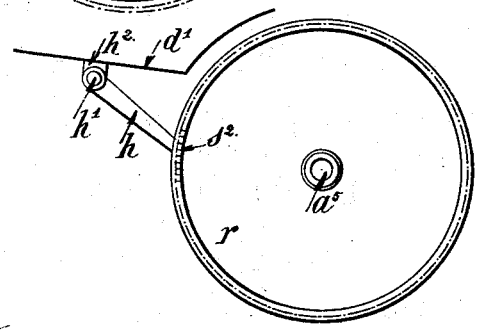


FIG_7_



WITNESSES.
C. Sedgwick
C. E. Stoltze

INVENTORS
A. Tauffliebb
BY V. Chaussard
Munn & Co
ATTORNEYS

UNITED STATES PATENT OFFICE.

AUGUSTE TAUFFLIEB AND VICTOR CHAUSSARD, OF ISSOUDUN, FRANCE.

WHEELBARROW.

SPECIFICATION forming part of Letters Patent No. 524,917, dated August 21, 1894.

Application filed March 21, 1894. Serial No. 504,551. (No model.) Patented in France January 5, 1893, No. 226,933, and in Belgium November 24, 1893.

To all whom it may concern:

Be it known that we, AUGUSTE TAUFFLIEB and VICTOR CHAUSSARD, both of the firm of Taufflieb & Chaussard and both machine-makers, of the city of Issoudun, Indre Department, in the Republic of France, have invented a new Upturning Wheelbarrow, (for which we have obtained Letters Patent of France for fifteen years, No. 226,933, dated January 5, 1893, and of Belgium, dated November 24, 1893;) and we do hereby declare that the following is a full and exact description thereof, reference being made to the accompanying drawings.

Our invention relates to an upturning wheel-barrow, the body of which is pivoted to the axis of the wheel and is raised by the action of a dog which, when the barrow is at work, engages with the periphery of the wheel at the desired moment or becomes connected and turns with it for upturning in a forward direction the body of the wheel-barrow. This upturning mechanism can be applied to any kind of wheel-barrow having one or more wheels, as well as to trucks, and so as to upturn the contents of the body of the same either toward the front or the side of the road followed by the barrow or truck. In its application to a wheel-barrow, the upturning body rests on a frame to which it is kept attached by means of a latch operated by the mechananism which operates the above-mentioned upturning arm, mechanism which is so regulated that it will unlock the body of the barrow before the said arm is in engagement and turns with the wheel.

In the accompanying drawings one form of our upturning wheel-barrow is shown only, as it will be obvious that the construction varies according to the form of wheel-barrow or truck to which it is applied.

Figure 1 is a side elevation, and Fig. 2 a plan view, the body of the wheel-barrow being removed. Fig. 3 represents the wheel-barrow at the moment of upturning. Fig. 4 is a detail view of the latch, which holds the body to the frame. Figs. 5, 6 and 7 show differently toothed wheels for engaging the upturning arm or lever.

The wheel-barrow consists of the frame, the upturning body, and the automatic upturning mechanism. We will successively describe these three component parts.

The frame of the barrow in the instance shown consists of the side bars a a', which are provided with suitable handles and are formed integrally with a cross bar a^2, which ranges across the front of the barrow, forming a fender for the wheel; and the axle a^5 of the wheel r, is journaled in depending brackets or hangers a^3, a^4, on the side bars a, a'. The side bars are provided in the rear of the wheel with legs b, one on each side of the barrow, the legs being in general of **V** shape and converging at their lower ends, and at said lower ends an inwardly disposed foot b' is formed, to which are secured the lower ends of the double **X** braces c, c, c', c' the upper ends of the rods forming such braces being secured to the side bars a, a'.

The body d is of any suitable size and of such shape as to extend over the wheel without interfering with the rotation of the latter, the rear end of the body normally resting on the side bars a, a', or other form of frame provided.

At the front the body is provided near each side, with arms g, g', which are so connected with the axle as not to rotate with the latter, and the body is further braced by braces g^2, g^2, which are secured to the body and to the arms g, g'.

On the under side of the body d a dog h is provided, preferably by mounting the same on a short shaft h' which is journaled in suitable hangers or brackets h^2 on the bottom of the body, the arrangement being such that the dog normally hangs free of the wheel but may be thrown into engagement with the wheel at its periphery, when desired.

In the arrangement shown there is a finger j, carried by a rocker arm j', the arm being pivoted to one side bar a or a', the finger j projecting inwardly from arm j' to a point back of and adjacent to the dog h.

On one side bar, a or a', at the handle end thereof, a bell crank is pivoted, one arm of which forms a thumb piece k, and the other arm n is connected by an elongated connecting rod m with the rocker arm j', before mentioned. Thus, by pressing downward on the thumb piece k, the connecting rod m will rock

the arm j' forwardly and the finger j will thus contact with the dog h and throw the free end of the latter into engagement with the wheel r, either into frictional engagement or positive engagement as hereinafter explained, and thereby cause the rotation of the wheel to automatically tilt the body forwardly to the dumping position indicated in Fig. 3.

The body d is normally held to the frame of the barrow by a latch device, and in order that the body will be released before the dog h is thrown into engagement with the wheel, the latch e is mounted on the connecting rod m, and provided with two latch projections e', e^2, which engage respectively with brackets f, f', secured respectively to the frame of the barrow and the body d. Each bracket is of an L-shape, as best seen in Fig. 4, and the horizontal flange or member thereof is bent at an angle at its outer end as at f^2. By this construction the connecting rod m, in its initial forward movement will withdraw the latch from engagement with the brackets f, f' and before the finger j', throws the dog h into engagement with the wheel r.

In the form shown in Figs. 1, 2 and 3, the periphery of the wheel is a smooth surface and the dog h has a frictional engagement therewith. In Figs. 5, 6 and 7, the wheel is shown as provided with teeth, Fig. 5 showing peripheral ratchet teeth s, Fig. 6 showing a substantially corrugated periphery s', and Fig. 7 showing an annular series of ratchet teeth s^2 at the side of the wheel near the periphery.

In practice it will be seen it is only necessary when the barrow approaches the dumping ground, to press down on the thumb piece k, which will throw the dog h, into engagement with the wheel, and the forward movement of the wheel will automatically tilt the body and dump the contents thereof, thus effecting a material saving of time and labor.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. In an upturning device for wheel barrows, and like bodies, the combination with the main frame and the drive wheel, of a body pivoted to swing upward and rearward, having a pendent portion pivoted thereto to hang over the front upper peripheral face of the wheel and a hand lever mechanism for throwing such pendent portion in contact with the said wheel, as and for the purpose set forth.

2. The combination with the main frame, the wheel, and the body pivoted to swing rearward and upward, of an upturning lever pivotally connected to the body, a lock device for holding the body down and an operating lever connected with the upturning lever and the lock device arranged when operated, to simultaneously release the lock and move the upturning lever in contact with the wheel, substantially as and for the purposes shown and described.

3. In a wheel-barrow or other wheeled vehicle, the combination with the body having arms pivotally held to the axle of the wheel, of a dog carried by the body adjacent to the periphery of the wheel, and movable into engagement therewith, the wheel when thus engaged serving to tilt the body, substantially as described.

4. The combination with the frame, the tilting body, and the wheel, of a dog on the body movable into engagement with the wheel, a finger adapted to throw said dog into such engagement, a latch device normally holding the body on the frame, and operating devices common to the latch and the finger, for actuating them in succession, substantially as described.

5. An improved wheel barrow, comprising a main frame, a supporting wheel, a body pivoted to the axle of such wheel to swing upward and rearward and having a pendent pivoted dog or lever member, held to swing normally over the front upper peripheral face of the wheel, a crank arm engaging such lever member and a lever extended out to one of the handles of the barrow and connected to the crank arm, all arranged as shown and described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

AUGUSTE TAUFFLIEB.
VICTOR CHAUSSARD.

Witnesses:
GEORGE LAURENT,
CLYDE SHROPSHIRE.