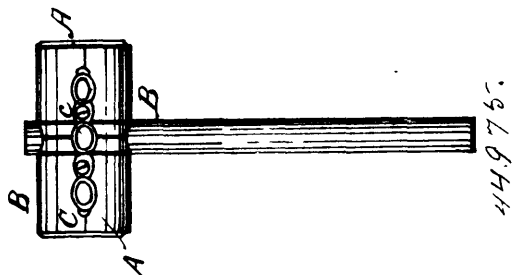


tube, having exterior screw threads at its end and cast with an annular flange having upon its inner side suitable lugs for the spokes to abut against, an annular screw threaded rim and shoulder to receive a suitable nose-band, substantially as and for the purpose set forth.

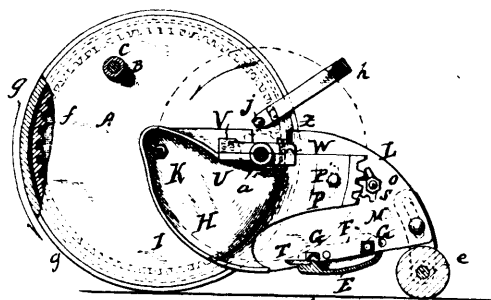
No. 44,975. Tool. (Outil.)



James Alfred Crane, Vila Road, Handsworth, Stafford, England, 27th December, 1893; 6 years.

Claim.—1st. In hand tools for fitting up metallic bedsteads, cots and the like, and for other suitable purposes, the combination consisting of a mallet A, with the addition of a strip or plate of metal B, having suitable holes therein C, for the purpose herein set forth. 2nd. In hand tools for fitting up metallic bedsteads, cots and the like, and for other suitable purposes, the combination consisting of a mallet D, with the addition of a hook or hooks, lever, or wrench or similar tool E, for the purpose set forth.

No. 44,976. Lawn Mower. (Faucheur de pelouse.)



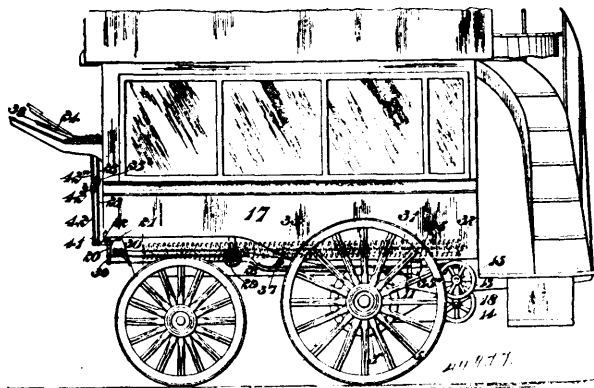
Sammel W. Martin, Springfield, Ohio, U.S.A., 28th December, 1893; 6 years.

Claim.—1st. In a lawn mower, the combination, with end plates, a connecting bar or rod, and a fixed blade-bar rigidly and non-adjustably secured to the plates, of adjustable bearing plates secured to the end plates and forming supports for the reel shaft, and a fastening device to hold the plates against slipping except when adjusted, and adjusting devices. 2nd. In a lawn mower, the combination, with an end plate, of a bearing plate, and fastening devices to secure it. 3rd. In a lawn mower, the combination, with an end plate, of a toothed bearing plate adjustably secured thereto, and a toothed device to engage said teeth and adjust the plates. 4th. In a lawn mower, the combination, with an end plate, struck-up of sheet metal, of a bearing plate of cast metal secured thereto, and acting to reinforce the struck-up plate. 5th. In a lawn mower, the combination, with an end plate, struck-up of sheet metal, of a bearing plate adjustably secured thereto, and acting to reinforce the struck-up plate, and to afford a bearing for the reel. 6th. In a lawn mower, the combination, with an end plate, of a bearing plate frictionally secured thereto and a fastening device to hold the plate against slipping except when purposely adjusted. 7th. In a lawn mower, the combination, with an end plate, of a bearing plate, an axle stud binding them together, a gear-wheel on said axle stud, a reel with the shaft mounted in said bearing plate, a fastening device to secure the two plates against the slipping of the bearing plate except when purposely adjusted, and a fixed blade carried by the end plates. 8th. In a lawn mower, the combination, with an end plate, struck-up of sheet material, of a bearing plate of cast material frictionally secured to the struck-up plate and adapted to reinforce it. 9th. In a lawn mower, the combination, with an end plate, and a bearing plate adjustably secured thereto, and an adjusting device adapted to move the bearing plate slowly and positively in either direction. 10th. In a lawn mower, the combination, with an end plate, and a bearing plate adjustably secured thereto, and having cog-teeth, of a toothed segment mounted

on the end plate and engaging with said teeth. 11th. In a lawn mower, the combination, with a journal bearing box composed of a fixed and a movable part, a spring holding them apart and sustaining the weight of one of them, and an adjusting screw to draw the movable plate down against the spring and into direct contact with the journal or bearing. 12th. In a lawn mower, the combination, with a fixed bearing plate, an upper movable bearing plate recessed, a spring in the recess on the fixed plate, an interlocking joint between the plates at the other end and a screw to draw them together. 13th. In a lawn mower, the combination, with an end plate and driving gear, of a ground-wheel separate therefrom and clutched thereto with a flange extending inward from the tread of the wheel to near the end plate, the width of the flange varying with the excess of diameter of the ground-wheel over the gear-wheel. 14th. In a lawn mower, the combination, with an end plate and driving gear-wheel, of a ground-wheel of more or less excessive diameter over the gear-wheel, and having a flange from its rim to near the end plate, the width of the flange varying with such excess of diameter.

No. 44,977. Propeller and Brake for Vehicles.

(*Propulseur et frein de voiture.*)



Harriet Carmont, Helmsdale, Kingston-on-Thames, Surrey, England, 28th December, 1893; 6 years.

Claim.—1st. In apparatus serving as a combined starter or propeller and brake for vehicles, the combination with fast and loose drums connected respectively with one of the rotary wheels or axles of the vehicle, and with a spring wherein energy is stored when the apparatus is acting as a brake, and means whereby said loose drum will become automatically connected with said wheel or axle when it is rotated by said spring, of a flexible connector such as a rope so wound upon said drums that when it is tightened thereon to cause the apparatus to act as a brake, the fixed drum will rotate the loose one in the opposite direction, and cause energy to be stored in said spring, and means such as an adjustable tightening pulley around which said connector or rope passes, and whereby the same can be tightened on said drums when desired, substantially as herein described for the purpose specified. 2nd. In apparatus serving as a combined starter and propeller and brake for vehicles, the combination with fast and loose drums connected respectively with one of the rotary wheels or axles of the vehicle, and with a spring wherein energy is stored when the apparatus is acting as a brake, and means whereby said loose drum will become automatically connected with said wheel or axle when it is rotated by said spring, of a flexible connector such as a rope so wound upon said drums that when it is tightened thereon to cause the apparatus to act as a brake, the fixed drum will rotate the loose one in the opposite direction, and cause energy to be stored in said spring, means for tightening said flexible connector or rope on said drums, and means for automatically preventing the second or loose drum being rotated by said spring until it is required to restart the vehicle by the energy stored in said spring, substantially as herein described. 3rd. In apparatus serving as a combined starter or propeller and brake for vehicles, the combination with fast and loose drums connected respectively with one of the rotary wheels or axles of the vehicle, and with a spring wherein energy is stored when the apparatus is acting as a brake, and means whereby said loose drum will become automatically connected with said wheel or axle when it is rotated by said spring, of a rope so wound upon said drum that when tightened thereon the fixed drum will rotate the loose one in the opposite direction, an adjustable tightening pulley around which said rope passes, a rope clutch adapted to automatically grip said rope, or the rope connecting said loose drum with said spring, when said spring tends to rotate said loose pulley, and means for releasing said clutch when the energy stored in said spring is to be utilized to restart or propel the vehicle, substantially as described. 4th. In apparatus serving as a combined starter or propeller and brake for vehicles, the combination with fast and loose drums connected respectively with one of the rotary wheels or axles of the vehicle and with a spring