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F. W. JOHNSON
CHILD'S TOY VEHICLE
Filed Jan. 27, 1926

FIG. 1.

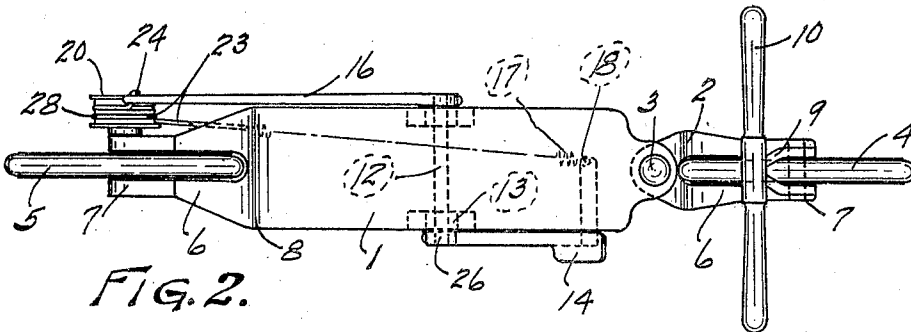
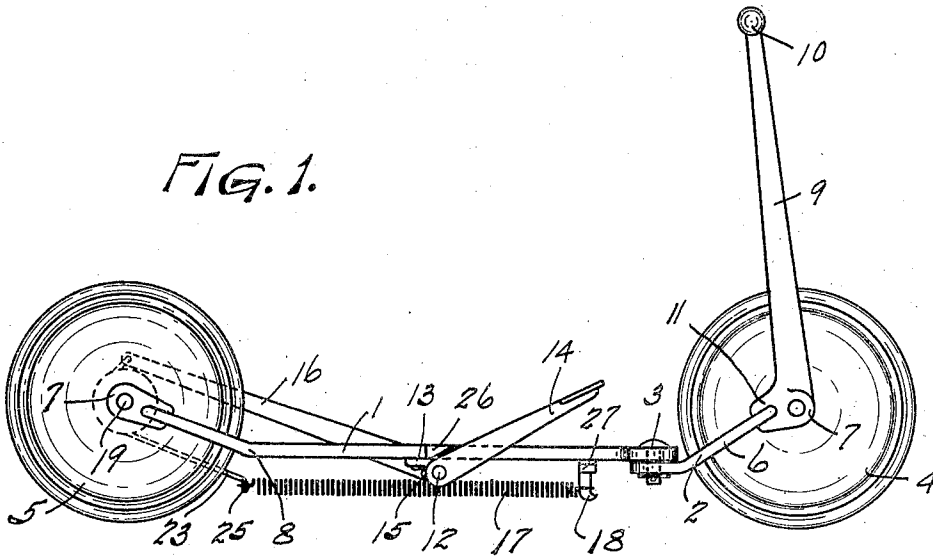


FIG. 2.

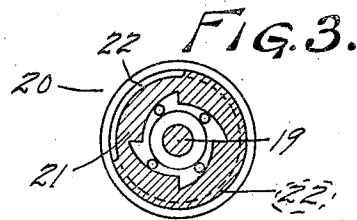


FIG. 3.

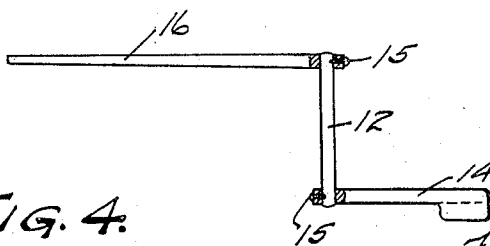


FIG. 4.

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CHILD'S TOY VEHICLE.

Application filed January 27, 1923. Serial No. 84,050.

This invention relates to a child's toy vehicle, and particularly to that class of toy vehicles commonly known as "scooters" for use upon side walks or other smooth surfaces; and the object of the invention is to provide a relatively simple, practical and durable device of this kind having means embodied therein for imparting intermittent propulsive action to the drive wheel by means of a foot lever constituting part of the vehicle, and without the necessity of the operator pushing the vehicle with one foot upon the ground, as is the case with the ordinary "scooter."

In the drawing—

Figure 1 is a side elevation;

Figure 2 is a plan view;

Figure 3 is a detail of the clutch mechanism;

Figure 4 is a detail showing the mounting of the crank to the shaft of the foot lever.

The invention consists of an elongated carriage board 1 having a pivot board 2 pivoted at 3 to what may be designated as the forward end of the board 1, the connected boards 1 and 2 being supported horizontally by front and rear wheels 4 and 5 respectively. For this purpose the rear end of the board 1 and the front end of the board 2 are forked as shown at 6, and the wheels are journaled within these forks between the bearings 7. The rear section of the board 1 is given an upward inclination from the point 8, being a length of the board 1 slightly more than the diameter of the wheel 5, and likewise the board 2 is given a similar upward inclination from its pivotal point 3. Thus the medial portion of the board 1 is supported in an "underslung" position relative to the wheel axles, and the pivot joint 3 is so arranged that the board 2 may swing laterally relative to the board 1. A forked steering post 9 with handle bars 10 is rigidly connected at 11 to the forward end of the board 2 as means for steering the vehicle. A short lever shaft 12 is journaled transversely under the center of the assembly in the bearings 13. Upon the extended right hand end of this shaft a foot lever 14 is rigidly but releasably mounted by means of a heavy set screw 15 passed through the end of the lever and into the shaft. A crank 16 is similarly

mounted at the left end of the shaft 12. Upon the extended left hand end of the axle shaft 19 of the rear wheel 5 is mounted a clutch mechanism 20 of a well known type, the same being arranged to grip the said shaft 19 upon the forward turning of the circular clutch drive shell 21 and to release the shaft upon the reverse turning of the said shell. A belt groove 22 is formed upon the periphery of the shell 21. A drive belt 23 is passed over this groove 22, the end of the upper stretch of the belt being fastened at 24 to the crank 16, and the opposite end at 25 to the rear end of a coiled reaction spring 17, the forward end of the said spring being secured to a lug 18 mounted at the under side of the forward end of the board 1. The belt 23 is wound around the shell 21 as shown at 28. The tension imparted to the spring and belt should be such as to normally raise the lever 14 to an elevated position above the board 1. A stop 26 upon the board 1 overlaps the lever 14 and prevents that lever being elevated to an excessive degree; and a similar stop 27 prevents the too great depression of the lever 14.

In use, the "scooter" is given a start by pushing with the right foot upon the ground, after which the right foot is brought to bear upon the foot lever 14 for imparting thereto a reciprocating motion, which motion in turn results in driving the vehicle forward.

While I have herein described a certain specific manner and method of constructing and assembling the elements of my invention, it is understood that I may vary from the same in minor details, not departing from the spirit of my invention, so as best to construct a practical device for the purpose intended, as defined in the appended claim.

I claim:

In a device of the kind described and embodying a wheel supported carriage board, the shaft of the drive wheel being provided with a clutch mechanism adapted to drive the vehicle forward, the said clutch mechanism having a circular drive shell provided with a peripheral belt groove; a lever shaft journaled beneath the carriage board; a crank rigidly secured to one end of the lever shaft and in approximate alignment with

the said belt groove of the clutch drive shell; a foot lever rigidly secured to the opposite end of the lever shaft; a drive belt passing over the said belt groove of the clutch drive shell, the end of the upper stretch of the belt being secured to the said crank; and a coiled reaction spring having its forward end attached to the forward end of the carriage board and its rear end attached to the free end of the said drive belt, the spring being thus mounted under tension sufficient to normally lift the said foot lever above the carriage board.

In testimony whereof I affix my signature.

FRANK W. JOHNSON.