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## INVENTIONS PATENTED.

NOTE.-Patents are granted for 18 years. The term of years for which the fee has been paid, is given after the date of the patent.

No. 66,863. Electric Motor. (Motcur électrique.)


Fig. $3.6686,9$
William Joseph Still, Toronto, Ontario, Canada, 2nd April, 1900; 6 years. (Filed 13 th J bine, 1899 .)
claim.-1st. In a motor vehicle and the like, the combination with the main driving axle and sprocket wheel secured at each end thereof, of the frame; the armature and axle thereof designed to rotate in one direction and having a sprocket pinion on one end, an idler sprocket pinion suitably journalled in the frame and a chain passing around the ider under the gear pinion and over the gear wheel, at one end of the main axle, and the field suitably journalled peripherially outside the armature and upon the axle of the same
designed to rotate in the opposite direction, the field axle, a gear pinion on the end of the field axle and the chain connecting such gear pinion to the sprocket wheel at the opposite end of the main axle as specified. 2nd. In a motor for vehicles or the like purposes, the combination with the armature and axle thereof designed to rotate in one direction, and the supplemental axle forming an extension thereof and a universal joint connecting the saine, of the fields suitably journalled peripherially outside the armature and upon the axle of the same and designed to rotate in the opposite direction and the supplemental shaft forming an extension of the rotating fields and a universal joint connecting the shaft to the field, as and for the purpose specified. 3rd. In a motor for vehicles and like purposes, the combination with the amature and axle thereof designed to rotate in one direction, and the supplemental axle forming an extension thereof and a universal joint connecting the same, of the fields suitably journalled peripherially outside the arma ture and upon the axle of the same and designed to rotate in the opposite direction and the supplemental shaft forming an extension of the rotating field and a universal joint connecting the shaft to the field, the hangers pivotally connected to the frame of the carriage so as to have a vertical swing, the collars connected on horizontal pivots to the hangers and forming supporting bearings for the fields and armature, as and for the purpose specified. 4th. The combination with the fields having the longitudinal extensions and the end nonmagnetic rings and the commutator and brushes of the armature and the shaft extending through such rings, the hangers located at each end and pivoted on a stud forming part of the same, the collars pivoted on end pins at the lower ends of the hangers and forming bearings for the motor, the insulated ring at each end provided with metal rings, the brushes journalled on the hangers and contracting with such rings and leads from such brushes at one end to the commutator brushes, and at the opposite end to the fields, as and for the purpose specified. 5th. The combination with the fields having longitudinal extensions, the end nommagnetic rings and the commutator and brushes, of the armature and the shaft thereof extending through such rings, the hangers located at each end suitably connected to the frame and forming a bearing for the field axle and the armature axle, the insulated rings at each end provided with metal rings, the brushes suitably journalled and contacting with such rings and leads from such brushes to the commutator brushes and to the fields as specified.

## No. 66,864. Manifold Writing Material.

(Matériel á copier multiple.)


John O. Foster, Newark, New Jersey, U.S.A., 2nd April, 1900; 6 years. (Filed 8th April, 1899.)
Cluim.-1st. For manifold writing, a sheet prepared with a light colomred transfer material upon the back, and a second sheet prepaloured with a darker coloured receiving surface that is sufficiently adhessue to receive and hold the material transferred from the back of the first sheet to the surface of the second sheet by pressure upon the surface of the finst sheet hy a pen, pencil, types, or otherwise, substantially as set forth. 2ud. For manifold writing, a sheet of paper adapted to being written uon and having a coating upon the back of pulvernlent light coloured material caused to adhere by

