

mechanism as required in the composition of matter, with mechanism for linearly compressing the line of type when completed thereby mechanically justifying it by reason of the yielding of the spaces and mechanism for moving the justified line out of the way, substantially as and for the purpose set forth. 14th. The combination, with mechanism for composing type, of a pair of rolls, and a shearing device, a key lever and connections whereby upon the depression of said lever, the shear and rolls are operated to sever a space, and means for delivering such space to the composing device, substantially as set forth. 15th. In combination with the composing mechanism of a type-setting machine, of a space making mechanism consisting of means for feeding a space ribbon and means for severing it into suitable lengths for spaces, a key, and connections whereby upon the depression of a key, a space is severed and delivered to the composing device, substantially as described. 16th. The combination of the feed rolls, the driving gear thereof, its ratchet, the rock-shaft carrying a pawl engaging said ratchet, and means for rocking said shaft, with a shear blade, and means for operating it from the rock-shaft, at the initial movement of the latter, and for retracting the blade immediately after it has operated, substantially as described. 17th. In a combined type and logotype-setting machine, the combination with distinct sets of holders respectively for font types and three or more letter logotypes, independent ejectors for each holder, and independent carriers for conveying the ejected type and logotype characters to a common assembling race-way, and a device for pushing the type and logotypes therein, all constructed substantially as described so that types and logotypes can be independently but correctly brought into position at will to be composed in a line in said race-way by said pusher, substantially as described. 18th. In a combined type and logotype-setting machine, the combination of separate type and logotype holders standing at angles to each other, mechanism for ejecting the type or logotype one at a time, and separate endless belt carriers beside and running parallel with each holder, for conveying the types into a common race-way, whereby said types and logotypes are automatically brought together in the composed matter, substantially as described. 19th. In a combined type and logotype-setting machine, the combination of a pair of stationary channelled type holders, mechanism for ejecting separate type or logotypes, from the respective holders, mechanism for conveying the ejected type or logotype to a common race-way, a device for partially rotating the logotype on their way to the race-way, and mechanism for aligning and forwarding them therein, substantially as described. 20th. In a combined type and logotype-setting machine, the combination of separate receptacles for the type and the logotype characters arranged at angles to each other, and each consisting of a series of parallel diagonal channels, keys and connections whereby upon the depression of a key the corresponding type or logotype is ejected from its channel, a common race-way or composing channel, and separate means for directing the ejected types and logotypes into said channel, substantially as described. 21st. In a combined type and logotype-setting machine, the combination of separate receptacles for the type and the logotype characters arranged at angles to each other, and each consisting of a series of parallel diagonal channels, keys and connections whereby upon the depression of a key the corresponding type or logotype is ejected from its channel, a common race-way or composing channel, and separate means for directing the ejected types and logotypes into said channel, and means for partially rotating said logotypes on their way to the channel, substantially as described. 22nd. In a type setting machine, the combination of two series of type channels standing substantially at right angles to and opening away from each other, a single race-way or assembling channel, at the proximate point of said series and independent mechanism whereby type from either channel is directed into the said race-way, substantially as described. 23rd. The combination of two series of type holding channels, arranged at angles to each other, a separate type carrier for each series, moving parallel therewith, a race-way at the junction of said series of channels, and mechanism whereby the types are directed from the carriers into said assembling race, substantially as described. 24th. The combination of two series of type channels, and an endless belt type carrier for each series, arranged at angles to each other, a single assembling race-way at the proximate point of said belts, and mechanism for diverting the type from both belts into the said race-way, and a single pusher for moving type into said race-way, substantially as described. 25th. In a type-setting machine the combination of two series of diagonal parallel type channels arranged at angles to each other, a carrier belt for each series, said belts running at angles to each other and toward a common race-way, and clutes and switches for directing the type from each belt into said race-way, and a device for pushing the types through the race-way, substantially as described. 26th. The combination of two series of type holding channels, and an independent carrier for each series, a common race-way, and means for directing the types from said carriers into said race-way, and means for partially rotating the type from one series of channels, substantially as described. 27th. In a combined type and logotype-setting machine, the combination of receptacles for each type and logotype character arranged at angles to each other, mechanism for ejecting the separate type and logotypes at the will of the operator from their respective holders, and independent type carriers moving toward, but lying at angles to, each other for conveying the ejected type or logotype to a common race-way at the meeting point of the carrier,

substantially as specified. 28th. In a combined type and logotype-setting machine, the combination of a receptacle for each type or logotype character, mechanism for ejecting the separate type or logotypes at the will of the operator from their respective holders, and mechanism for conveying the ejected type or logotype to a common race-way, and means for turning the logotype so that it will align with the type, substantially as described. 29th. A type reservoir having a series of parallel type channels, and formed of top and bottom diagonally grooved bars, and vertical strips  $a'$ , secured in the grooves of said bars, having thin longitudinal portions  $a''$  at rear, and tapered at one end as at  $a'$ , substantially as described. 30th. The combination of two type reservoirs arranged at angles to each other, and an endless belt carrier for each reservoir, means for driving one of said belts from the other, and mechanism for ejecting type from either reservoir directly upon its belt, and a common receiver into which the types from either belt are directed, substantially as described. 31st. The combination in a type-setting machine, of type reservoirs, a single assembling race-way, means for conducting type thereto from the reservoirs, and means for rotating the type from one reservoir, substantially as described, prior to its assembling in the race-way, substantially as specified. 32nd. The combination of two type reservoirs, a single race-way, means for conducting type from both reservoirs to said race-way, and means for partially rotating the type from one reservoir prior to its entering the race-way, and means for pushing the type successively into said race-way, substantially as described. 33rd. In a type-setting machine, the combination of two series of type channels standing at substantially right angles to each other and both opening outwardly, means for ejecting type from any channel in either series, an endless belt carrier running beside each series, and each at an angle to the other belt, a single race-way, means for directing types from either belt into the common race-way, a vibrating setter for pushing type into said race-way, the gearing between the belt driving wheels, and the devices for operating said setter from one of the belt wheels, all constructed and arranged to operate substantially as and for the purpose set forth. 34th. In a combined type and logotype-setting machine, the combination of an ordinary type reservoir for holding type with their nicks vertical, and a word logotype reservoir for holding the logotype with nicks horizontal and uppermost, with devices for ejecting separate types or logotypes at will, and separate movable carriers for respectively conveying the types and logotypes when ejected to a common race-way or composing channel, and a common setter for aligning them in the said race-way, substantially as described. 35th. In a combined type and logotype-setting machine, the combination of a pair of stationary receptacles for type and logotype characters respectively, arranged substantially at right angles to each other, keys and connections whereby upon depression of a key the corresponding type or logotype is ejected from its holder, a common type channel or race-way, into which the ejected types or logotypes are delivered, and an endless belt carrier beside the lower end of each receptacle for conveying the ejected types and logotypes separately to said race-way, and means whereby the types are successively moved into said race-way, substantially as described. 36th. The combination of a series of type channels, an endless belt extending parallel with the series, and close to the lower ends thereof, keys and connections for ejecting the type upon the belt at will of the operator, a race-way, into which the types are delivered, and a vibrating spring controlled pusher for moving the types into said race-way, a pitman for vibrating said pusher, operated in one direction by a cam on one of the belt driving wheels and in the opposite direction by a spring, all constructed and arranged, substantially as described. 37th. The combination, with the type holding and delivering mechanism, and race-way, of the vibrating pusher or setter  $O$ , mounted on a rock shaft  $O'$ , a pitman rod  $P$  for rocking said shaft, a spring  $Q$  on said rod adapted to cause it to force said setter yieldingly in one direction, to set the type, and a rotating cam  $P'$  engaging said rod to move it in the opposite direction and draw the setter outward against the action of the spring, substantially as described.

#### No. 48,500. Electrically Propelled Vehicle.

(Voiture électrique.)

Henry C. Baker, Kansas City, Missouri, and Heber Stone, Breunham, Texas, assignees of John R. Elberg, Kansas City, Missouri, all of the U.S.A., 3rd April, 1885; 6 years.

*Claim.*—1st. An electrically propelled vehicle, comprising a wheeled frame, a battery carried thereby, a motor electrically connected to said battery, friction discs mounted upon and rotating with the motor-shaft, and friction discs mounted to rotate with certain wheels of the vehicle, and engaged by the first-mentioned friction discs, substantially as set forth. 2nd. An electrically propelled vehicle, comprising a wheeled frame, a motor carried thereby, a bracket carried by the rear axle of said frame, a spring carried by said bracket, a motor yieldingly supported upon said spring, and electrically connected to the battery, small friction discs mounted upon the motor-shaft, and large friction discs carried rigidly by the wheels of the frame journaled loosely upon the said axle, substantially as set forth. 3rd. An electrically propelled vehicle, comprising a wheeled frame, a bracket carried by the rear axle of said wheeled frame, a spring carried by said bracket, a battery located in the body of the vehicle, a motor mounted upon said spring and