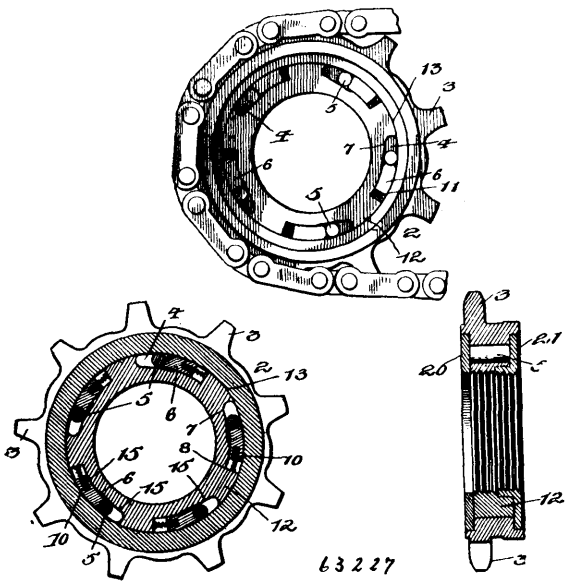
Claim.—In an article of manufacture an insulator consisting of a cylindrical body having a groove 10 passing approximately half way round near its top, a groove 11 passing round its opposite side curved downwards and intersecting the opposite ends of the groove 10, and teeth 13 designed to grip the bearing surface on which it rests to prevent its turning when fastened, as specified.

No. 63,227. Clutch Mechanism. (*Mécanisme d'embrayage.*)



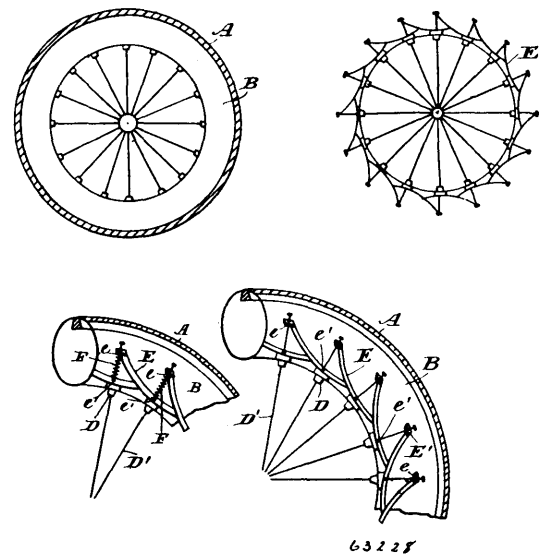
Alexander Patterson Morrow and Harmon Healy Fulton, both of Elmira, New York, U.S.A., 10th June, 1899; 6 years. (Filed 27th September, 1898.)

Claim.—1st. A friction clutch comprising concentric rings arranged one within the other, one of said rings having peripheral recesses, in combination with rollers arranged within said recesses, and spring-pressed guide blocks, arranged one in rear of each roller, said blocks bearing against the rollers throughout their length. 2nd. A friction clutch comprising a hub formed with peripheral recesses, and a ring encircling said hub, in combination with transverse rollers loosely supported in said recesses, a series of guide blocks also located in said recesses, in rear of the rollers, and extending throughout the length of the rollers and springs located in rear of said blocks, and adapted to project the blocks against the rollers, while the hub and ring are revolving together, but to be compressed by frictional contact of the blocks and ring when the revolution of the latter is arrested. 3rd. A friction clutch comprising a hub formed on its periphery with a series of equidistant recesses, each of which is rounded and bevelled at its bottom, and a ring encirling said hub, in combination with rollers located within the recesses and having movement on the bevelled surfaces thereof, and a series of spring pressed guide blocks, one for each roller, located in said recesses in rear of the rollers and adapted to slide on the rounded surfaces of the recesses. 4th. In a friction clutch, the combination with a hub formed with a series of equidistant recesses separated by radial lugs, of a sprocket rim encircling the rim, a roller within each of said recesses, a bearing block in each recess in rear of its roller, bearing against the latter, throughout its length, and formed at its rear side with a pin opening, a pin supported loosely in said opening, and a coil spring surrounding the pin. 5th. In a fraction clutch, the combination with a hub formed on its periphery with a series of equidistant recesses, a sprocket rim encircling said hub, a roller within each of said recesses, and a spring-pressed guide block located in each of said recesses in rear of the roller, said blocks being rounded or hollowed out on their surfaces, and bearing against the rollers throughout the length of the latter.

No. 63,228. Wheel for Vehicles. (*Roue de voiture.*)

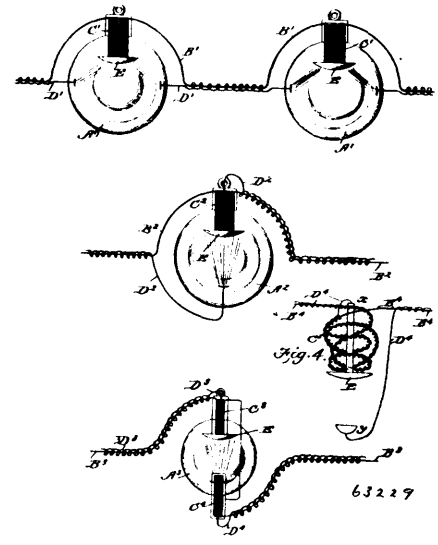
George Harris Lewis, Joseph Augustus Labatt, John Goggan, Leon Blum, and Henry J. Labatt, all of Galveston, Texas, U.S.A., 10th June, 1899; 6 years. (Filed 12th July, 1898.)

Claim.—1st. In combination, the tubular rim, the spokes loosely passing into the same, and the series of independent springs carried within the tube, each spring having one end connected to one of the spokes, an opening approximately centrally thereof through which the next spoke passes and having its opposite end bearing against the under face of the next adjoining spring, substantially as described. 2nd. In combination, the tubular metallic rim, the spokes passing loosely into the same, the series of springs located within the rim, each spring having one end connected to the extremity of one spoke, having an opening approximately centrally thereof through which the next spoke passes, and having its opposite end bearing against the under side of the adjoining spring, and an auxiliary tire or tread portion for said tubular rim, substantially as



described. 3rd. In a wheel for vehicles, the combination of a rim with spiral springs F interposed between springs E at the outer extremity of spokes D^1, each of said springs E bearing with a point intermediate its two ends on the rim, one extremity of each spring E being held in position by means of the nut E^1, and the other extremity resting on the preceding spring E, substantially as described. 4th. An improved wheel for vehicles, constructed with a rim of aluminum or other suitable metal, an auxilliary tire attached to the rim having movable spokes passing loosely through the rim to the end of springs forming a continuous controlled spring tread, substantially as shown and described.

No. 63,229. Electric Lighting Apparatus.
(*Appareil de lumière électrique.*)



Andrew Plecher, Savannah, Georgia, U.S.A., 10th June, 1899; 18 years. (Filed 1st May, 1899.)

Claim.—1st. An electric lamp comprising a vacuum bulb, an electro magnet having one pole within said bulb and provided with a light emitting surface as described and its helix arranged in a primary circuit wire, an insulated secondary wire wound around the primary wire throughout its length between lamps and extending the full length of said primary wire between lamps and provided within the bulb with cathode terminals, substantially as and for the purpose described. 2nd. An electric lamp comprising a vacuum bulb, one or more electro magnets each having one pole within said bulb and provided with light emitting surface as described, and its helix arranged in a primary circuit wire, an insulated secondary wire wound around