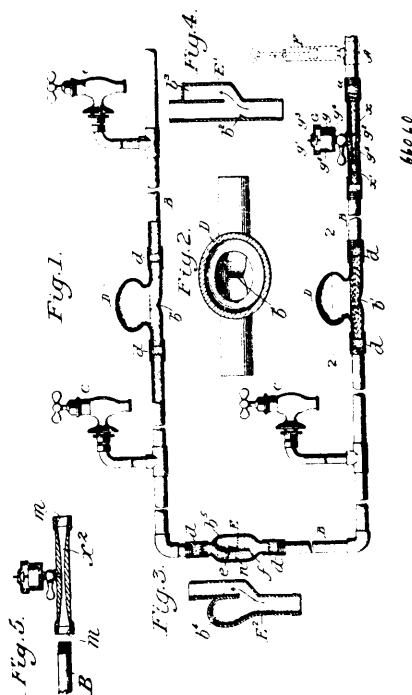


to said base and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said base to hold the tire on the wheel. 2nd. In a tire for vehicles, a series of elastic knobs or sections, a common base for said series provided with said flanges extending beyond said knobs or sections, a fabric material vulcanized to said base and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said flanges to hold the tire on the wheel. 3rd. In a tire for vehicles, a series of elastic knobs or sections, a common base for said series provided with side flanges extending beyond said knobs or sections, a fabric material vulcanized to said base throughout its width and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said flanges to hold the tire on the wheel. 4th. In a tire for vehicles, a series of elastic sections or knobs, a common base for said series provided with said flanges extending beyond said sections or knobs and with end flanges between said knobs or sections, a fabric material vulcanized to said base throughout its width and length and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said side and end flanges to hold the tire on the wheel. 5th. In a tire for vehicles, a series of elastic sections or knobs, a common base for said series provided with side flanges extending beyond said sections or knobs and with end flanges between the said knobs or sections, a fabric material vulcanized to said base throughout its width and length and integral therewith and reinforcing and stiffening the same, and a clamping band having cross bars and adapted to engage said side and end flanges to hold the tire on the wheel. 6th. In a tire for vehicles, a series of longitudinally and transversely arranged elastic sections or knobs, a common base for said series, a fabric material vulcanized to said base and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said base to hold the tire on the wheel. 7th. In a tire for vehicles, a series of longitudinally and transversely arranged elastic sections or knobs, a common base for said series provided with side and end flanges, a fabric material vulcanized to said base throughout its length and width and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said flanges to hold the tire on the wheel.

**No. 66,060. Apparatus for Preventing the Bursting of Water Pipes.** (*Appareil pour empêcher les tuyaux à eau de crever.*)



Nevil Munroe Hopkins, Washington, District of Columbia, U.S.A., 1st February, 1900; 6 years. (Filed 18th September, 1899.)

*Claim.*—1st. The combination of a water pipe, an expansion chamber connected therewith and a transverse rib or flange therein

to deflect the freezing water or ice laterally. 2nd. The combination of a water pipe, a separate expansion chamber opening thereinto, and a deflecting flange or rib in the pipe opposite the mouth of the expansion chamber. 3rd. A water pipe, a section of which is provided with a chamber open at both ends for the passage of water, and another chamber for containing air, and for receiving ice or freezing water and having a mouth or opening in line, or substantially in line, with the direction of flow or pressure in the water pipe. 4th. A water pipe in which is interposed a casting provided on one side with a free passage for water, and also on the other side with a vertically arranged stationary or fixed air containing chamber having a greater vertical length than breadth, and provided with a mouth at its lower end and in line with the direction of flow or pressure in the water pipe. 5th. The combination of a water pipe and an interposed, oblong casting provided with an air tight, vertical expansion chamber in line, or substantially in line, with the direction of flow or pressure in the water pipe, and having a deflected passage around the chamber for the flow of water. 6th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, and devices for supplying a gas, such as air, to the chamber. 7th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, and a device connected with the water pipe for supplying air to the water pipe from which it in turn passes to the expansion chamber. 8th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, and means for admitting or forcing air into the water pipe. 9th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, an air inlet port for admitting air to the water pipe, a valve controlling this port, means for inducing a flow of air through the valve and into the pipe. 10th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, an air inlet port for admitting air to the water pipe, a valve controlling this port, and a nozzle in the pipe extending past the port. 11th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, a vessel communicating with the water pipe and having an air inlet, a valve controlling the air inlet, a float to which the valve is attached, and a nozzle within the water pipe extending past the passage between the water pipe and the valve chamber.

**No. 66,061. Manufacture of a Composition from Rhea Fibre.** (*Fabrication d'une composition de fibre rhé.*)

William James Cordner, London, England, 1st February, 1900; 6 years. (Filed 26th October, 1899.)

*Claim.*—1st. A process for the manufacture of a composition consisting of a treatment of Rhea fibre, gummed or degummed, in a solution of silicate of soda, of a density of 15° to 20° Beaume, the drying of same to extract the moisture, the saturation of the fibre with a heavy hydrocarbon such as resin oil and the like, the mechanical removal of superfluous heavy hydrocarbon, the treatment by heat of the saturated fibre to transform it into a heavy hydrocarbon cellulose, the mechanical disintegration of the said cellulose and the mixture therewith of gums, resins, oxidisable oils, and the like to form a composite material, substantially as described. 2nd. A composite material made from Rhea fibre consisting of heavy hydrocarbon cellulose mixed with oils, resins, gums, and similar materials, substantially as described.

**No. 66,062. Cleaning and Polishing Compound.**

(*Composé pour nettoyer et polir.*)

Arthur Manning Waitt, New York City, New York, U.S.A., 1st February, 1900; 6 years. (Filed 1st December, 1899.)

*Claim.*—A liquid compound for cleaning and polishing varnished surfaces, consisting of a permanent emulsion composed of a refined petroleum having a specific gravity of thirty-two or about thirty two degrees Baumé, and diluted acid that is not injurious to varnish, and having the said ingredients mixed in the proportion of about one part of the petroleum to two parts of the diluted acid, substantially as set forth.

**No. 66,063. Kinematographic Apparatus.**

(*Appareil kinematographique.*)

Paul Mortier, Civil Engineer, of 7 Place Mi Careme, St. Etienne, in the Republic of France, 1st February, 1900; 6 years. (Filed 31st August, 1899.)

*Claim.*—1st. In a kinematographic apparatus, traversing the pellicle or photographic film in front of reflectors that produce a virtual image thereof, rectangular, parallel and inverted in relation to the image that would be produced on a single plane mirror, rotating the reflectors about an axis lying in the plane of the virtual image, and coincident with the symmetrical axis thereof, and projecting the image on to a screen by means of a lens placed on a line