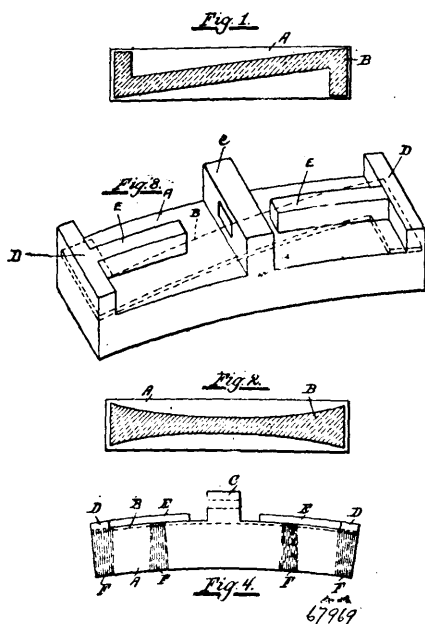


valve actuated by the movements of the diaphragm and two fluid pressure chambers having a passage between them controlled by the diaphragm valve for automatically moving the steam valve and opening and closing the exhaust ports, substantially as described. 7th. In a water heater for locomotive tanks, the combination of a valve chamber communicating with the exhaust of the steam chest of an air compressing pump, exhaust ports leading from such chamber, one for direct exhaust and the other for exhaust into a heating coil in the water tank, a valve controlling such ports, a tube or cylinder in the water tank containing fluid expansible under heat, a diaphragm moved by the expansion and contraction of the fluid from the temperature of the water, a valve actuated by the movements of the diaphragm, a fluid pressure chamber having communication with a compressed air reservoir, a fluid pressure chamber having communication with the chamber of the steam valve and a passage between the two fluid pressure chambers controlled by the diaphragm valve for automatically moving the steam valve and opening and closing the ports, substantially as described. 8th. In a water heater for locomotive tanks, the combination of an air compressing pump, a valve controlling the direction of the exhaust from the steam chest of the pump, a heating coil in the water tank, a compressed air reservoir, a fluid pressure chamber communicating with the chamber of the exhaust controlling valve, a passage between the two chambers and a valve for such passage actuated by the differential pressure from the temperature of the tank water for automatically moving the steam exhaust controlling valve, substantially as described. 9th. In a water heater for locomotive tanks, the combination of an air compressing pump, a valve controlling the direction of exhaust from the steam chest of the pump, a heating coil in the water tank, a compressed air reservoir, a fluid pressure chamber, a pipe leading from the compressed air reservoir to such chamber, a second fluid pressure chamber, a pipe leading from such chamber to the valve chamber of the steam exhaust, a passage between the two fluid pressure chambers, a valve controlling such passage, and a diaphragm for actuating the valve moved by differential pressure from the temperature of the water in the tank, for automatically moving the exhaust controlling valve, substantially as described. 10th. In a water heater for locomotive tanks, the combination of an air compressing pump, a valve controlling the direction of exhaust from the steam chest of such pump, a heating coil in the water tank, a compressed air reservoir, a fluid pressure chamber, a pipe leading from the compressed air reservoir to such chamber, a second fluid pressure chamber, a pipe leading from such chamber to the steam exhaust valve chamber, a passage between the two fluid pressure chambers, a valve controlling such passage, a diaphragm for actuating the valve, and a tube or cylinder containing fluid expansible under heat and contracting and expanding from the temperature of the water in the tank, to move the diaphragm and automatically move the steam exhaust controlling valve, substantially as described.

**No. 67,969. Brake Shoe. (Sabot de frein.)**

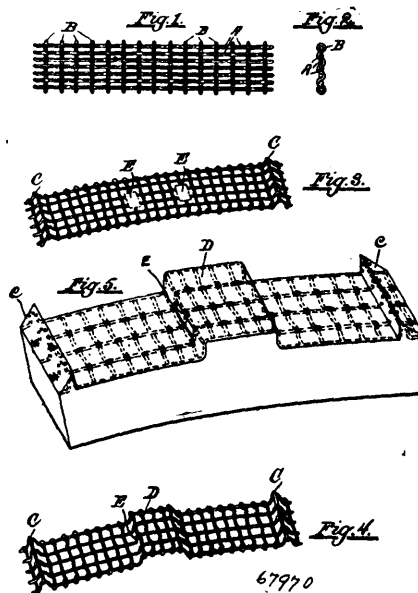


Joseph D. Gallagher, Glen Ridge, New Jersey, U.S.A., 4th July, 1900; 6 years. (Filed 8th March, 1900.)

**Claim.**—1st. In a brake shoe, composed of alternate soft iron and deep chilled iron sections, a binding strip of tough metal of less width than the shoe except at its extreme ends and having its ends

broadened to substantially the full width of the shoe and embedded in the shoe immediately adjacent to the back thereof, substantially as described. 2nd. In a brake shoe composed of alternate soft iron and deep chilled iron sections, a Z-shaped binding strip embedded in the shoe immediately to the back thereof, substantially as described. 3rd. In a brake shoe, the binding strip embedded in the back of the shoe in combination with a rib or ribs so cast on the back of the shoe as to cover said binding strip for more than half its length, substantially as described.

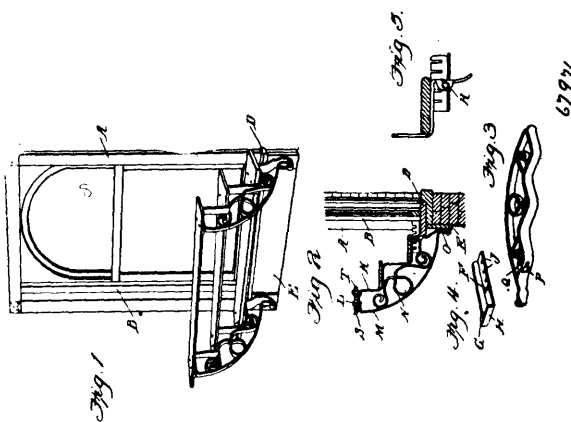
**No. 67,970. Brake Shoe. (Sabot de frein.)**



Joseph D. Gallagher, Glen Ridge, New Jersey, U.S.A., 4th July, 1900; 6 years. (Filed 8th March, 1900.)

**Claim.**—1st. A brake shoe having a back of wire mesh in combination with a cast iron body or wearing face, substantially as described. 2nd. A brake shoe having a back of wire mesh with lugs and fastening devices integral therewith in combination with a wearing face or body of cast iron, substantially as described. 3rd. A brake shoe having a back of wire mesh with lugs and fastening devices integral therewith and reinforced by the cast iron of the shoe and embedded in the body of cast iron immediately adjacent to the back thereof, substantially as described.

**No. 67,971. Window Bracket for Displaying Flowers. (Console de fenêtre pour l'étalage des fleurs.)**



Henry M. Johnson, Gloversville, New York, U.S.A., 4th July, 1900; 6 years. (Filed 18th June, 1900.)

**Claim.**—1st. The bracket hanger plate herein described, consisting of a plate of metal provided with a bottom flange and an end flange, both at right angles to the main body of the plate, and a series of