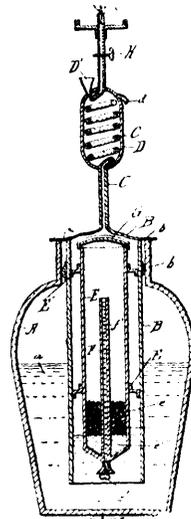


connected with a ground contact-point adapted to be closed by the armature of the electromagnet at this other end of the section, a danger signal and a safety signal in each circuit wire, the one signal being located at one end of the section, and the other signal being located at the other end of the section, substantially as shown and described. 3rd. An electric signalling apparatus, comprising an electromagnet and its armature at each end of the section, an independent circuit wire leading from each electromagnet to the other end of the section, and connected with a ground contact point adapted to be closed by the armature of the electromagnet at this other end of the section, a danger signal and a safety signal in each circuit wire, the one signal being located at one end of the section and the other signal being located at the other end of the section, and means, substantially as described, for sending a momentary current to the electromagnet by a part carried by the car, as set forth. 4th. An electric signalling apparatus, comprising an electromagnet and its armature at each end of the section, an independent circuit wire leading from each electromagnet to the other end of the section and connected with a ground contact point adapted to be closed by the armature of the electromagnet at this other end of the section, a danger signal and a safety signal in each circuit wire, the one signal being located at one end of the section and the other signal being located at the other end of the section, means, substantially as described, for sending a momentary current to the electromagnet by a part carried by the car, and means, substantially as described, controlled by the armature of the said electromagnet for sending a live current through the said electromagnet and the respective circuit wire whenever the corresponding armature is attracted, as set forth. 5th. An electric signalling apparatus, comprising an electromagnet and its armature at each end of the section, an independent circuit wire leading from each electromagnet to the other end of the section and connected with a ground contact point adapted to be closed by the armature of the electromagnet at this other end of the section, a danger signal and a safety signal in each circuit wire, the one signal being located at one end of the section and the other signal being located at the other end of the section, and live wires connected with contact points adapted to be engaged by the armatures of the electromagnets when said armatures are attracted to send a live current of electricity through the respective circuit wire, to set a safety signal at one end of the section, and a danger signal at the other end of the section, substantially as shown and described. 6th. An electric signalling apparatus, comprising hangers at the end of the section and adapted to be momentarily engaged by the trolley wheel of the car entering the section, an electromagnet and its armature at each end of the section and connected with said hanger so that a momentary current can pass from the hanger to the electromagnet at the time the trolley wheel is in engagement with the said hanger, a circuit wire leading from each electromagnet to the other end of the section and connected with a ground contact point adapted to be closed by the armature of the electromagnet at this other end of the section, a danger signal and a safety signal in each circuit wire, the one signal being located at one end of the section and the other signal being located at the other end of the section, substantially as shown and described. 7th. An electric signalling apparatus, comprising hangers at the ends of the section and adapted to be momentarily engaged by the trolley wheel of the car entering the section, an electromagnet and its armature at each end of the section and connected with said hanger so that a momentary current can pass from the hanger to the electromagnet at the time the trolley wheel is in engagement with said hanger, a circuit wire leading from each electromagnet to the other end of the section and connected with a ground contact point adapted to be closed by the armature of the electromagnet at this other end of the section, a danger signal and a safety signal in each circuit wire, the one signal being located at one end of the section and the other signal being located at the other end of the section, and live wires connected with contact points adapted to be engaged by the armatures of the electromagnets when the said armatures are attracted, to send a live current of electricity to the respective current wire to set a safety signal at one end of the section and a danger signal at the other end of the section, substantially as shown and described. 8th. An electric signalling apparatus, comprising hangers at the ends of the section and adapted to be momentarily engaged by the trolley wheel of the car entering the section, an electromagnet and its armature at each end of the section and connected with said hanger, so that a momentary current can pass from the hanger to the electromagnet at the time the trolley wheel is in engagement with said hanger, a circuit wire leading from each electromagnet to the other end of the section and connected with a ground contact point adapted to be closed by the armature of the electromagnet at this other end of the section, a danger signal and a safety signal in each circuit wire, the one signal being located at one end of the section and the other signal being located at the other end of the section, and a grounding connection for each circuit wire and controlled from the armature of the other electromagnet to ground the circuit wire when this armature is retracted, substantially as shown and described. 9th. An electric signalling apparatus, comprising two hangers at the end of each section, one hanger being adapted to be engaged by the trolley wheel of the car entering the section, and the other by the trolley wheel of the car leaving this end of the section, two electromagnets and their armatures at each end of the section and connected by wires with said hangers at this end of the section, so that a momentary current

can pass from the respective hanger to the corresponding electromagnet to energize the same, a circuit wire leading from the electromagnets at one end of the section to a ground contact controlled by the armature of one of the electromagnets at the other end of the section, a safety signal and a danger signal in each circuit wire, the one being at one end of the section and the second signal being located at the other end of the section, substantially as shown and described.

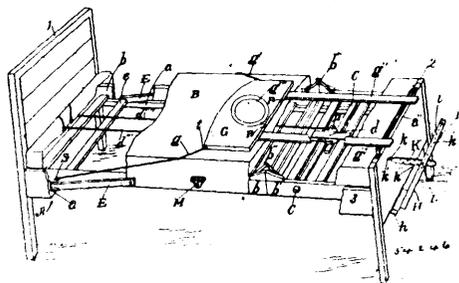
**No. 54,245. Lamp for Dentists' Use.**  
(*Lampe pour dentistes.*)



Henri Edmond Casgrain, Quebec, Province of Quebec, Canada, 2d December, 1896; 6 years. (Filed 15th May, 1896.)

*Claim.*—1st. In a lamp, the combination with an outer vessel for holding water, of a cylinder open at the bottom and provided with means for regulating the passage of gas from its upper part, said cylinder being supported in the said vessel, and a vessel for holding carbide of calcium supported in the said cylinder and provided with an upwardly projecting perforated pipe having a valve at its lower part for permitting the water to enter in pre-arranged quantity to act upon the carbide, substantially as set forth. 2nd. In a lamp, the combination, with a vessel in which acetylene gas is generated, of a gas pipe provided with a coil and projecting from the said vessel and a drip catcher supported under the gas pipe inside of the said vessel and operating to prevent any water formed in the gas pipe from falling on the carbide of calcium, substantially as set forth. 3rd. In a lamp, the combination with an outer vessel for holding water, of a cylinder provided with a cover and a gas pipe at its upper end and supported in the said outer vessel, a vessel for holding carbide of calcium supported above the open bottom of the said cylinder and provided with an upwardly projecting perforated pipe, and a regulating screw provided with a wedge-shape groove and controlling the passage of the water to the carbide, substantially as set forth.

**No. 54,246. Bed for Invalids.** (*Lit pour invalides.*)



Jackson Beers Young, Pasadena, and David Joseph Kennelly Santa Monica, both in California, U.S.A., 2nd December, 1896; 6 years. (Filed 13th November, 1896.)

*Claim.*—1st. In a bed, the combination of the mattress frame pivoted at its middle to a support, and formed of a long main section and a short foot section hinged together to fold upward but not downward, a separate and independent seat-board arranged to rest on the mattress and extending from the middle thereof toward the foot section, and seat-board supporting means arranged to hold the seat-board in an approximately horizontal position when the mattress frame is tilted. 2nd. In a bedstead, the combination of the support, the mattress frame pivoted at its middle to the support