

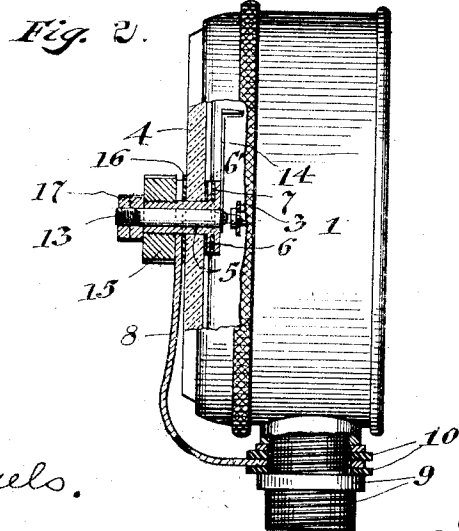
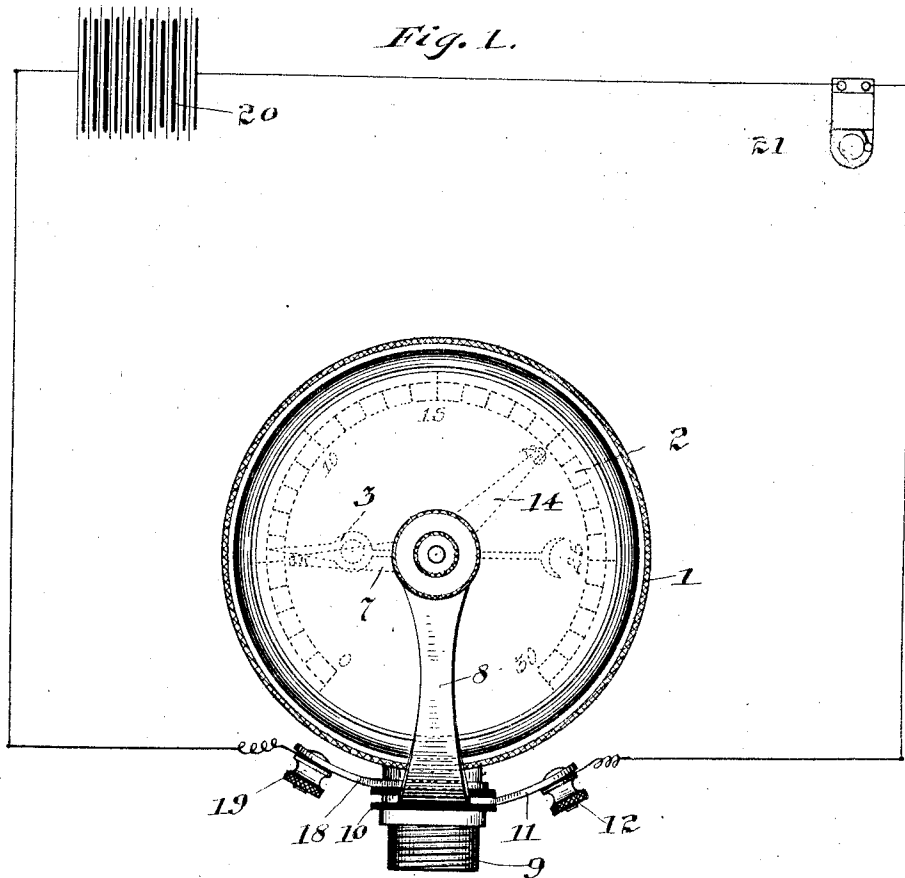
H. OENNING.

GAGE.

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1,023,166.

Patented Apr. 16, 1912.



Witnesses:

C. E. Wessels.

B. G. Richards

Inventor:

Herman Oenning,

By *John R. H. Folke*
his Attorney.

UNITED STATES PATENT OFFICE.

HERMAN OENNING, OF CHICAGO, ILLINOIS.

GAGE.

1,022,166.

Specification of Letters Patent.

Patented Apr. 16, 1912.

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To all whom it may concern:

Be it known that I, HERMAN OENNING, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Gages, of which the following is a specification.

My invention relates to improvements in gages and has for its object the provision of an improved gage adapted to notify the operator when a specified high or low pressure is reached.

The invention consists in the combinations and arrangements of parts all as will be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification and in which,

Figure 1, is a face view of a gage embodying my invention and showing the electric alarm circuit employed in the device diagrammatically, and Fig. 2, a side elevation of the gage partially in section.

The preferred form of construction as illustrated in the drawing comprises an ordinary pressure gage 1 provided with the usual scale 2, indicator finger 3 and glass face plate 4 covering said scale and finger. The face plate 4 is provided with a central perforation and a headed stud 5 is inserted through said perforation with its head portion taking against the inner side of plate 4, a pad 6 being interposed to prevent breaking of said plate. An electric contact 7 is secured to head 6 extending radially therefrom, the outer end thereof being bent inwardly into the path of finger 3. A metallic strip 8 is slotted at its end to embrace stud 5 and is secured to the usual threaded stud 9 on the gage, said plate being insulated from said stud 9 by means of insulating disks 10, as shown. At one side member 8 is provided with an arm 11 carrying a binding post 12 adapted to receive one end of an electric alarm circuit. A stem 13 is inserted through stud 5 and carries an electric contact 14 at its inner end, said contact extending radially therefrom and having its outer end bent inwardly into the path of finger 3. A thumb-nut 15 is threaded on the outer end of stud 5 and serves to secure member 8 thereto and as a means for turning said stud, a pad 16 being interposed between member 8 and the outer side of plate 4 to prevent breaking of said plate. Stem

13 also carries thumb-nuts 17 which are smaller in diameter than thumb-nut 15 and serves as a means for adjusting contact 14. An arm 18 is secured to stud 9 and is in electric contact therewith and carries a binding post 19. One end of an electric alarm circuit is secured to binding post 19 thus grounding said circuit on said gage and in electrical connection with finger 3, the other end of said circuit being secured to binding post 12 and thus placed in electrical connection with both of the contacts 7 and 14 but being insulated from gage 1 and finger 3. Said electric alarm circuit includes a battery 20 and electric bell 21.

In use contacts 7 and 14 are set to contact with finger 3 at the limits of the pressure desired. For instance, as shown in Fig. 1, contact 7 is set to make contact with finger 3 when the latter registers $5\frac{1}{2}$ lbs., and contact 14 is set to contact with finger 3 when the finger 3 registers $19\frac{1}{2}$ lbs. It will be observed that when the pressure falls to $5\frac{1}{2}$ lbs., the electric alarm circuit will be closed by contact between finger 3 and contact 7 and bell 21 operated to give an alarm. When the pressure rises to $19\frac{1}{2}$ lbs., finger 3 will contact with contact 14 and likewise close the circuit to ring the bell and give an alarm. The construction disclosed will be found to constitute a simple and efficient construction.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation or modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the exact details of construction set forth, but desire to avail myself of such variations and modifications as fall within the scope of the appended claim.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

The combination with a gage having a scale and an indicator finger, of a glass face plate covering said scale and finger, said face plate being provided with a central perforation; a perforated metallic stud passed through said opening and having a head secured against the inner side of said face plate; a contact secured to said head and extending radially therefrom, the outer end of said contact being bent inwardly into the path of said finger; a stem rotatable in

the perforation of said stud; a contact secured to the inward end of said stem and extending radially therefrom, the outer end of said contact being bent inwardly; means
5 for adjustably securing said stud and stem in position on said plate; a threaded stud on said gage; a metallic strip slotted at its end to embrace said first mentioned stud and perforated to embrace said threaded stud; in-
10 sulating disks arranged on said threaded stud on each side of said metallic strip; a nut threaded on said threaded stud; a laterally extending arm on said metallic strip; a binding post on said laterally extending

arm; another laterally extending arm embracing said threaded stud and in electrical contact therewith; a binding post on said other laterally extending arm; and an electric circuit connected with said binding posts, substantially as described. 15 20

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMAN OENNING.

Witnesses:

HELEN F. LILLIS,
JOSHUA R. H. POTTS.