

L. HAMMOND.
METHOD AND APPARATUS FOR INDICATING HEAT.
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1,345,767.

Patented July 6, 1920.

Fig. 1

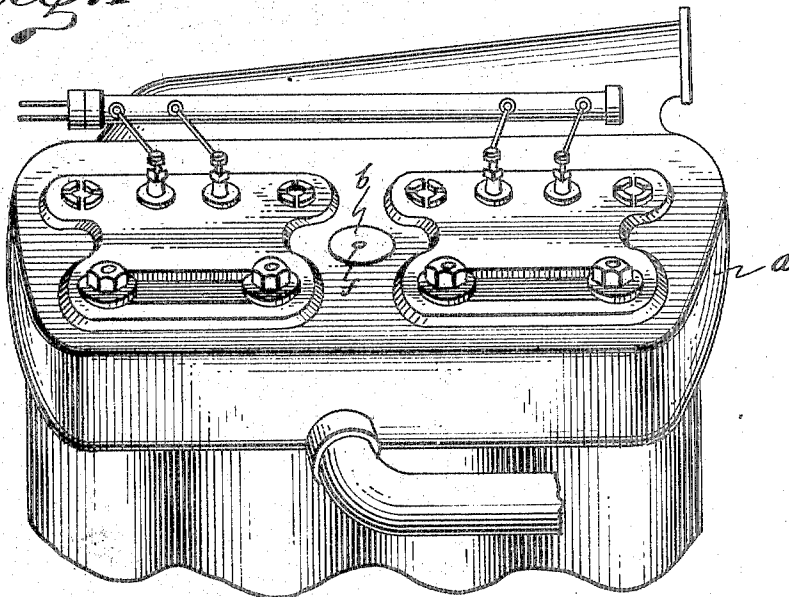


Fig. 2

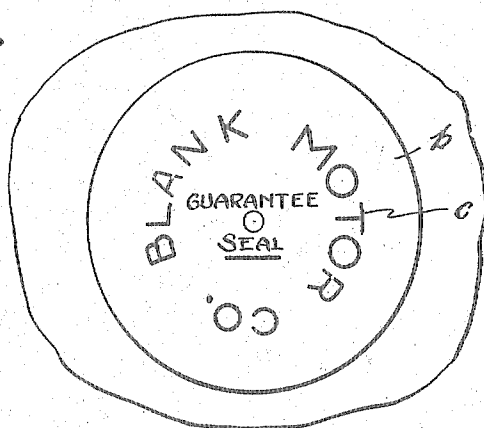


Fig. 4

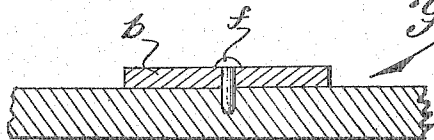
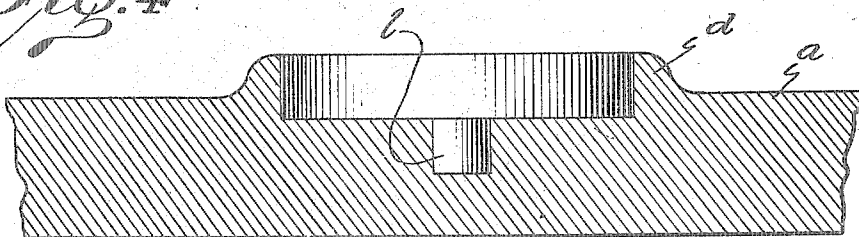


Fig. 5

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METHOD AND APPARATUS FOR INDICATING HEAT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LAURENS HAMMOND, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Methods and Apparatus for Indicating Heat, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to method of and apparatus for detecting whether or not an engine or other mechanism has been heated to or above a certain temperature.

The object is to provide a means to determine whether or not an engine or other mechanism has been allowed to overheat or has been heated to or above a certain temperature. Said means is adapted to record this fact in such a fashion that after such action has taken place it can be determined whether or not such temperature point has been reached or passed.

In the drawings—

Figure 1 is a perspective of a portion of an engine with my device attached thereto.

Fig. 2 is an elevation of my device as affixed.

Fig. 3 is a sectional elevation of my device in place.

Fig. 4 is a sectional view of a modification of my device.

Let *a* represent an engine structure and *b* my metal stamp or seal affixed thereto, the surface or face of this seal or stamp being configured according to any desired design or in any determined fashion. The inscription appearing on the surface of the seal may very well be the name of the company manufacturing the goods to which the seal is to be affixed. This inscription or legend is here indicated by the letter *c*.

For the purposes hereinafter set forth, this inscription appearing on the surface of the seal will be contoured or shaped from the material of the seal itself rather than being imprinted or impressed thereon. The seal may be affixed to the engine in any desired manner, as shown in Fig. 4. A boss, as at *d*, may be formed on the wall of the engine, then the same is spot-drilled as at *i*, so as to provide a recess to receive this seal and retain it in place.

A preferred form would be to affix the seal to the engine wall by means of an escutcheon pin *f*, as shown in Fig. 3, which is the usual method of fastening name plates or other similar articles.

This seal *b* will be composed of metal or other satisfactory material adapted to fuse at a temperature slightly above or substantially near the boiling point of water; at least its melting-point will be substantially below that of the structure to which it is affixed.

Engines and other mechanism and particularly internal combustion engines are frequently allowed to overheat, due either to carelessness, oversight, imperfect cooling due to a number of causes, et cetera. Consequently the engine is damaged, if not ruined. In the service of motor companies, it is frequently found that engines and parts are returned for replacement where the fault is obviously not due to a defect in structure or manufacture, but which fact is difficult to prove. The present seal is designed to meet this need. It is permanently affixed to the engine wall and the engine manufacturer's name, trade-mark, or other distinguishing mark is configured on the face thereof. When the temperature of the engine rises above a certain point, the metal of the seal fuses to an extent sufficient to partially, if not completely, obliterate this mark.

This affords a certain means for detecting whether or not the engine has been allowed to heat to or above such temperature point. It is apparent that these seals might be of infinite variety, composed of various materials, affixed to the engine in very many different ways and in a number of different places. These particulars are each and all of little importance as bearing upon the spirit of the invention.

The process of detecting whether or not an engine, or other mechanism has been heated to or above a certain temperature is therefore broadly the scope of this invention. This process consists in affixing to an engine a seal *b* bearing on its face a configuration, such seal being composed of a substance adapted to fuse sufficiently to partially, if not completely, efface said configuration at a point substantially near the boiling point of water, such point being at least substantially lower than the fusing point of the engine structure itself.

Claims:

1. The process of detecting whether or not an engine has been heated to a certain temperature by affixing thereto a configured stamp formed of such material that when the engine has been heated to such temperature the stamp will fuse sufficiently to obliterate the configuration thereon so as to indicate such fact.
2. A seal adapted to be affixed to an engine, said seal bearing on its face, an inscription, and being composed of a material adapted to fuse sufficiently to substantially erase said inscription at a temperature which would injure the engine.
3. A manufacturer's name-plate adapted to be affixed to an engine, said plate being of material adapted to fuse so as to partially, if not completely, obliterate the name when heated somewhat above the boiling point of water.
4. The process of detecting whether an engine has been heated to a certain temperature by affixing thereto a stamp, the surface of which is inscribed, such stamp being formed of material adapted to fuse sufficiently to obliterate the inscription at a temperature which would injure the engine.

In testimony whereof I sign this specification.

LAURENS HAMMOND.