This invention relates to regulators for oil wells or the like and has particular reference to improvements for such regulators as that set forth in my co-pending application for Letters Patent filed in the United States Patent Office on June 23, 1925, and given Serial Number 39,152.

The primary object of the present invention is to set forth improvements and refinements of construction which have not heretofore been known or used in the manufacture of oil well regulators.

The present invention relates particularly to means for extinguishing a burning oil well without losing the siphoning effect or pressure of the same.

A further object of this invention is to provide a novel flow-restricting member which has desirable operating means adapted to be controlled from a point some distance from the well.

Minor objects will be apparent throughout the detailed specification and claim.

In the drawing:

25 Figure 1 is a side elevation of the oil well regulator constructed in accordance with the present invention.

Fig. 2 is an end view of the same.

Fig. 3 is a vertical central section of the device taken on line III—III of Fig. 2.

Fig. 4 is a cross section of the regulator taken on line IV—IV of Fig. 3 with the slidable mounted shaft in a position to turn the flow of oil or gas through the passage formed for that purpose, and,

Fig. 5 is a perspective view of the slidable mounted shaft removed from its working position.

Like reference numerals refer to like parts throughout the several views, and the numeral 6 designates the well-known oil or gas well casing through which the oil or gas is allowed to escape.

It is known that oil or gas escaping from the well will oftentimes become ignited and create a heat intense enough to preclude its being turned off by anyone close to the mouth of the well.

This regulator which is interposed in casing 6 to control the flow of oil or gas or entirely cut off the same may be constructed to provide a body composed of an upper and a lower member 7 and 8, respectively, which should be of heavy metal and screwthreaded to casing 6 as shown in Figs. 3 and 4. An opening 9, formed by members 7 and 8 allows unrestricted flow of the oil or gas as long as there is no need or desire to stop the same or direct the flow to one side through passage 10. When this action becomes necessary, shaft 11, which also has an opening 12 therethrough to continue opening 9, may be moved along until opening 9 is entirely closed. A further movement in the direction of the arrow (Fig. 3) will cause angled connecting passage 13 to join opening 9 and passage 10. This action, when caused to take place when oil or gas is burning at the upper end of casing 6 will extinguish the flame and still allow the well to retain its siphoning action by permitting the oil or gas to pass out passage 10 immediately after the fire is extinguished.

Any suitable clamps 14 may be used to anchor the regulator to casing 6 and to the ground, and a flange 15 integral with one end of member 11 may be used to limit the movement of the same.

Novel means for operating the shaft 11 from a great and safe distance may be made as shown in the drawing, which consists of providing a pair of arms 16, fastened as at 17 to the upper block 7 of the regulator body. Arms 16 support a bearing 18 which holds a screwthreaded stub shaft 19 adapted to engage tapped cavity 20 of member 11.

The outer end of shaft 19 is provided with a drum wheel 21 around which is wound any suitable cable 22. Cable 22 may be of any length after leaving wheel 21 and may lead to any safe place where the operator can pull the same when necessary. A handle 23 is provided to re-wind the cable after it has been unwound to operate the device.

The operation of the device is obvious from the above description and drawings, and it is desired to be limited in the construction of this particular invention only by the appended claim.

What is claimed is:

A regulator of the class described comprising in combination, a body including an upper and a lower member, an arcuate groove formed in the adjoining face of each of said members whereby an opening is formed through said body from one end to the other, a single horizontal passage formed by a coacting lateral groove in each member of said body, a shaft having a head formed on one end thereof, mounted in said opening through said body and having one of its ends projecting beyond the end thereof, the axial tapped socket in the projected end of said
shaft, a screw supported for rotary movement only by the body to engage said tapped socket, vertical passages through each of said body members adapted to aline with a vertical passage extending through said shaft when said regulator is in the open position, and an angular passage formed in said shaft, whereby when said screw is operated to pull the shaft laterally, flow of fluid through said vertical passage is diverted to flow horizontally through said lateral passage.

In testimony whereof I hereunto affix my signature this 15th day of July, 1925.

MALVA M. ROBERTSON.