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J. D. FARR. DESTRUCTIBLE LINK OR AUTOMATIC FIRE EXTINGUISHER.

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UNITED STATES PATENT OFFICE.

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DESTRUCTIBLE LINK OR AUTOMATIC FIRE-EXTINGUISHER.

No. 900,673.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Original application filed October 26, 1907, Serial No. 399,380. Renewed September 4, 1908. Serial No. 451,739. Divided and this application filed January 18, 1908. Serial No. 411.481.

To all whom it may concern:

Be it known that I, Jonathan D. Farr, a citizen of the United States, residing at Monroe, in the county of Walton and State 5 of Georgia, have invented a new and useful Destructible Link or Automatic Fire-Extinguisher, of which the following is a specification.

This invention relates to automatic fire ex-10 tinguishers of that general class shown and described in my former application for Letters Patent filed on the 26th day of October, 1907 under Serial No. 399380, and of which

the present application is a division.

The object of the invention is to provide a novel form of link for connecting the several sections of cables constituting the detector or restraining member, said link being formed of pivotally united sections held in as-20 sembled position by a fusible or combustible binding member so that in case of a fire or excessive rise in the temperature, said combustible member will be destroyed and permit the operation of the mechanism for stopping the machine and extinguishing the fire.

A further object of the invention is to

form one of the pivoted sections of the link with a contracted throat for the reception of the free end of the mating section, said mat-30 ing section being provided with a laterally extending bill to assist in preventing accidental displacement of the combustible or

fusible member.

A still further object of the invention is 35 generally to improve this class of devices so as to increase their utility, durability and

efficiency.

Further objects and advantages will appear in the following description, it being 40 understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of

the appended claims.

In the accompanying drawings forming a 45 part of this specification: Figure 1 is an elevation partly in section illustrating the application of the invention to a cotton gin. Fig. 2 is a perspective view of one of the links of the restraining device detached. 50 Fig. 3 is a side elevation of the same showing the pivoted section of the link in open or inoperative position.

Similar numerals of reference indicate corresponding parts in all of the figures of

55 the drawings.

The improved device forming the subject matter of the present invention is principally designed for use in connection with cotton gins, linters, pickers and the like and by way of illustration is shown in connection 60 with a cotton gin of the ordinary construction in which 5 designates the gin, and 6 the trunk or conveyer leading to a fan 7.

The device consists of a flexible restraining member preferably in the form of a 65 wire cable, the latter being formed of a plurality of sections 8 connected by coupling

members or links.

The cable or restraining member 8 extends over suitable pulleys 9 and has one end 70 thereof attached to the interior of the convever 6 above the gin and its opposite end extended through the gin with its terminal connected to the adjacent end of a lever 10.

The lever 10 is pivotally mounted on a 75 suitable support 11 and is connected at its lower end with a cord or other fiexible medium 12, which latter extends over a pullev 13 and is provided with a suitable weight 14 for maintaining the restraining 80 device under tension.

The coupling members or links are each formed of pivotally united sections 15 and 16, the member 15 being preferably formed of a single length of wire one end of which 85 is bent to produce an eye 17 while the opposite end thereof is bent upon itself at 18 and thence extended laterally in spaced relation to the intermediate portion of the link to form a contracted throat 19. The mat- 90 ing section 16 of the link is also preferably formed of a single piece of wire one end of which is provided with a loop or eye 20 which engages the eve 17, while the opposite end thereof is provided with a straight arm 95 portion 21 which enters the throat 19 when the pivoted sections are in closed or operative position.

That portion of the section 16 between the arm 21 and the loop 20 is inclined laterally 100 to form a loop or enlargement 22 for engagement with the terminal ring 23 of the adjacent cable section 8, there being a similar ring 24 engaging the section 15 at the throat 19 whereby the link is connected in and nor- 105 mally forms a part of said restraining de-

vice. The sections 8 are preferably coiled or twisted around the adjacent rings 23 and 24, as indicated at 25, so as to form in effect a 110

pivotal connection between the same and thus permit the cable to be readily passed over the several pulleys and positioned at different portions of the machine or other

5 structure to be protected.

The link sections 15 and 16 are normally held in closed position by a combustion band or member 26 which surrounds the lower section 15 at the throat thereof and also surrounds the arm 21 of the section 16, said combustible member being preferably formed of celluloid. If desired, however, the member 26 may be formed of fusible material without departing from the spirit of the invention.

The end-of the arm 21 is bent upwardly to form a laterally extending lip or bill 27 which serves to prevent longitudinal movement of the destructible member 26 in one direction, the inclined portion of the member 16 serving to limit the longitudinal movement of said member in the opposite direction thereby to prevent accidental dis-

placement of the same.

25 It will thus be seen that in case of fire or excessive rise in the temperature the member 26 will be destroyed thereby causing the weight 14 to actuate the lever 10 to stop the operation of the machine and at the same time open the valve 28 to permit the flow of water through the perforated pipe 29, in the manner described in my former application above referred to:

While the restraining member and connecting link is principally designed for use in connection with cotton mills it is obvious that the same may be used with equally good results in factories, machine shops, stores, private dwellings or wherever a device of this kind is found applicable or de-

sirable.

Having thus described the invention what is claimed is:

1. In a device of the class described a restraining member including a link formed of pivotally united sections movable laterally to open position, one of said sections being provided with a contracted throat adapted to receive the free end of the mating section when said sections are in closed position, and a destructible member embracing both link sections at said throat.

2. In a device of the class described, a restraining member formed of a plurality of sections, links connecting the several sections comprising the restraining member, said links being each formed of pivotally united members movable laterally to open position, said link members being locked in closed position by a destructible member extending transversely across and embracing both link sections at the free ends thereof.

3. In a device of the class described, a flexible restraining member, and a link constituting a part of the restraining member 65 and formed of pivotally united members one of which is provided with a laterally extending bill, and a destructible member extending transversely across and surrounding both of said link sections at said bill.

4. In a device of the class described, a restraining member, a link forming a part of the restraining member and comprising pivotally united sections one of which is formed with an arm terminating in a laterally extending bill and the other with a contracted throat for the reception of said arm, and a destructible member surrounding

the link sections at said bill.

5. In a device of the class described, a restraining member including a link formed of pivotally united sections one of which is bent upon itself to form a contracted throat, the other link section being inclined laterally at the pivoted end thereof and having its sopposite end seated in the throat and terminating in a laterally extending bill, and a destructible member surrounding the link sections at said bill for normally locking the sections in closed position.

6. In a device of the class described, a restraining member including a link comprising pivotally united sections each formed of a single piece of wire, the wire forming one of the link sections being bent upon itself to 95 form a contracted throat and the wire forming the mating link section having one end thereof bent to produce an eye for pivotal connection with the adjacent section and its opposite end extending within the throat and 100 bent laterally to form a bill, and a destructible member surrounding the link sections at said bill.

7. In a device of the class described, a restraining member formed of a plurality of 105 sections, rings secured to the opposite ends of said sections, and links connecting the rings and each formed of pivotally united members one of which is extended through the adjacent ring and thence bent to form a 110 contracted throat the other link member being provided with a lateral loop for engagement with the contiguous ring and thence extended between the walls of the throat and bent laterally to produce a terminal bill, and 115 a combustible or fusible member surrounding the link members at said bill.

In testimony that I caim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JONATHAN D. FARR.

Witnesses:

R. H. LOCKHART, R. A. HARRISON.