

W. F. FESSLER.
SAFETY DEVICE.
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Patented Mar. 11, 1913.

1,055,625.

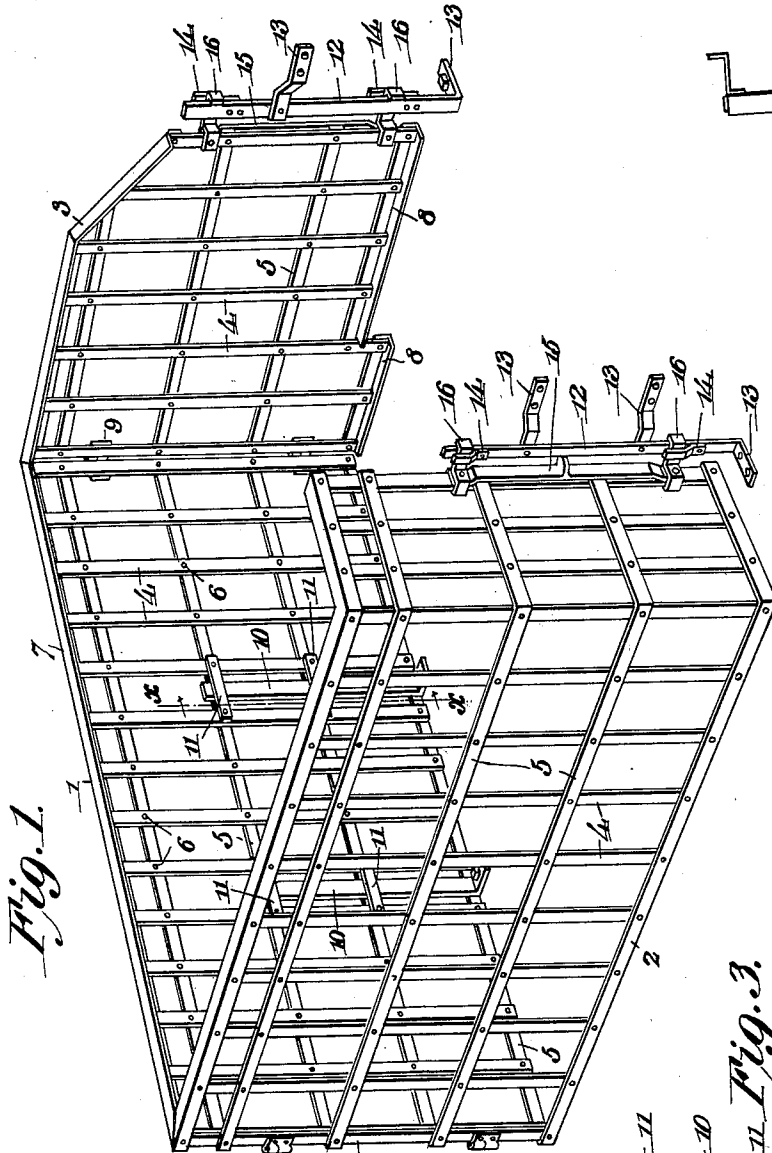


Fig. 1.

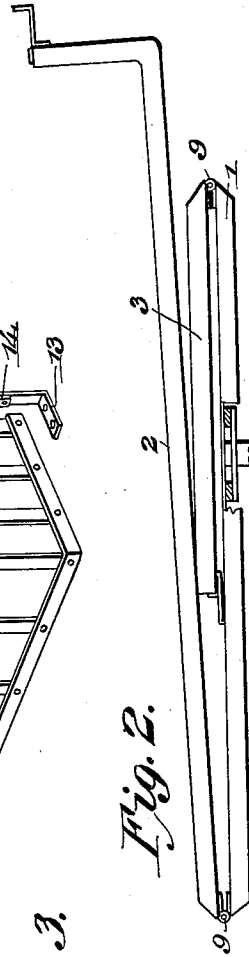


Fig. 2.

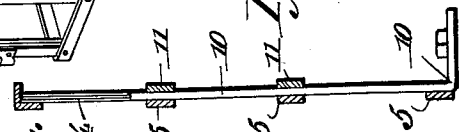


Fig. 3.

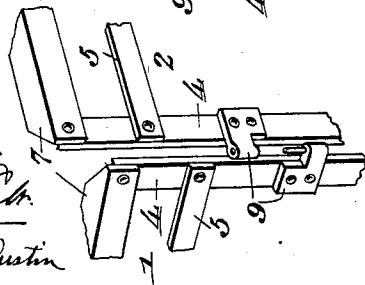


Fig. 4.

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UNITED STATES PATENT OFFICE.

WEAVER F. FESSLER, OF GROVE CITY, PENNSYLVANIA, ASSIGNOR TO NATIONAL SAFETY GUARD COMPANY, OF GROVE CITY, PENNSYLVANIA.

SAFETY DEVICE.

1,055,625.

Specification of Letters Patent.

Patented Mar. 11, 1913.

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To all whom it may concern:

Be it known that I, WEAVER F. FESSLER, a citizen of the United States, residing at Grove City, county of Mercer, and State of Pennsylvania, have invented certain new and useful Improvements in Safety Devices, of which the following is a specification.

My invention relates to safety guards for machinery, that is, to guards adapted to be placed about or adjacent the exposed rotating or reciprocating elements of a machine to prevent persons or clothing from coming accidentally into contact with the same.

The object of my invention is to provide a safety guard for the purpose mentioned which may be readily and quickly removed when it is desired to have access to the guarded portions of the machine and which may be as readily and as quickly replaced in position.

A further object of my invention is to provide a device for the purpose mentioned adapted to inclose a large top portion of the machine and in which a part or parts thereof may be swung out of the way to obtain access to portions of the machine without necessitating the removal of the entire device.

A further object of my invention is to provide a device characterized as above stated which may be folded to occupy but little space when not in use.

A further object of the present invention is to provide a device for the purpose stated that shall be strong and durable in order to adapt the same for use in machine shops where heavy material is used and where the guard may be subjected to more or less severe uses.

Other objects will appear hereinafter.

With these objects in view my invention consists generally in a guard consisting of two or more hingedly connected sections, means for rigidly but removably supporting one of said sections and means for detachably securing the other section or sections.

My invention further consists in a guard of the character under consideration comprising a plurality of detachably and hingedly connected sections and means for supporting one of said sections.

My invention further consists in various details of construction and arrangements of parts all as will be fully described here-

inafter and particularly pointed out in the claim.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification and in which—

Figure 1 is a perspective view of a safety guard embodying my invention; Fig. 2 is a top plan view of the same in folded position; Fig. 3 is a detail sectional view on substantially the lines $x-x$ of Fig. 1, and Fig. 4 is a detail perspective view illustrating the means for detachably connecting the several sections.

The guard is formed of two or more sections, as before stated, and in the drawing I have illustrated the same as formed of three sections 1, 2 and 3 respectively adapted to inclose an end and a portion of the adjacent sides of a machine. Each section is formed of a plurality of vertical members 4 and a plurality of horizontal or longitudinal members 5 which are riveted together at their points of intersection, as at 6. The members 4 and 5 are flat iron bars and when riveted together form a strong rigid and durable structure. An angle iron 7 is preferably provided at the upper edge, riveted to the upper ends of the members 4 and increasing the strength and rigidity of the device. If preferred similar angle irons 8 may be secured to the lower ends as shown at the bottom of section 3, or the lower member may be one of the flat longitudinally disposed bars 5 as shown at the bottom of sections 1 and 2.

The sections 2 and 3 are hingedly connected to the section 1 by means of hinges 9, and these hinges are of such construction that the sections may be readily detached from each other and are so arranged that the sections 2 and 3 may be lifted from the section 1, as shown clearly in Fig. 4. Means hereinafter described are provided for rigidly supporting the member 1, so that the members 2 and 3 are hingedly and detachably mounted thereon. To rigidly, but detachably support the section 1, I provide standards 10 comprising flat iron bars adapted to be secured to the floor adjacent the machine to be guarded, and there engage in slots or eyes provided on the section. The eyes or slots are formed by securing short bars 11 upon the faces of the

bars 4 opposite the bars 5, the slots being the spaces between the bars 5 and 11 and adjacent bars 4. Two pairs of bars 11 are provided, those of each being one above the other, so that the device is secured in position by sliding the section down over the uprights or standards 10 so that said standards engage in said slots. To remove the device as a whole, the sections 2 and 3 are swung upon their hinges so as to fold against the outer face of the section 1, and the device is then lifted from the standards 10. It is obvious that when access is desired to only a part of the machine, the adjacent section 2 or 3 as the case may be, may be swung out of the way or entirely removed without disturbing the remainder of the device.

To secure the hinged sections 2 and 3 in closed position I provide a standard adapted to be secured in position adjacent the end of the section when closed, and equip the section with a latch for engaging the same. 12 indicates the standard which comprises an upright bar provided with means 13 for securing it in position to the machine frame and floor or other stationary place. Secured to the bar 12 are angle members 14 which are engaged by the latch on the swinging section. This latch comprises a bar 15 mounted for vertical reciprocation on the end member 4 of the section and having projecting fingers 16 to engage the members 14 on the upright or standard 12. To slid-

ably secure the bar 15 to the section, strips of flat iron are bent to encircle the member 4 and preferably the ends of the bar 15, and are riveted or otherwise secured to the ends of said bar; one end of each of said strips projecting to form the fingers 16.

It is obvious that the device may be readily removed either as a whole or in part when it is desired to have access to the portions of the machine guarded thereby, and as readily replaced. Furthermore, it is strong and durable and will withstand without injury the usual rough usage to which it is liable to be subjected.

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

A safety guard for machinery comprising a plurality of vertically disposed sections hingedly connected, a pair of supporting standards, means on one of said sections for detachably and slidably engaging said standards, other standards arranged adjacent the free ends of the outer sections and latches for securing said free ends to the last mentioned standards, substantially as described.

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

WEAVER F. FESSLER.

Witnesses:

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T. A. CRANFORD.