Oct. 9, 1945. J. S. WHITE 2,386,525

ROOF CENTER

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Fig. 1.

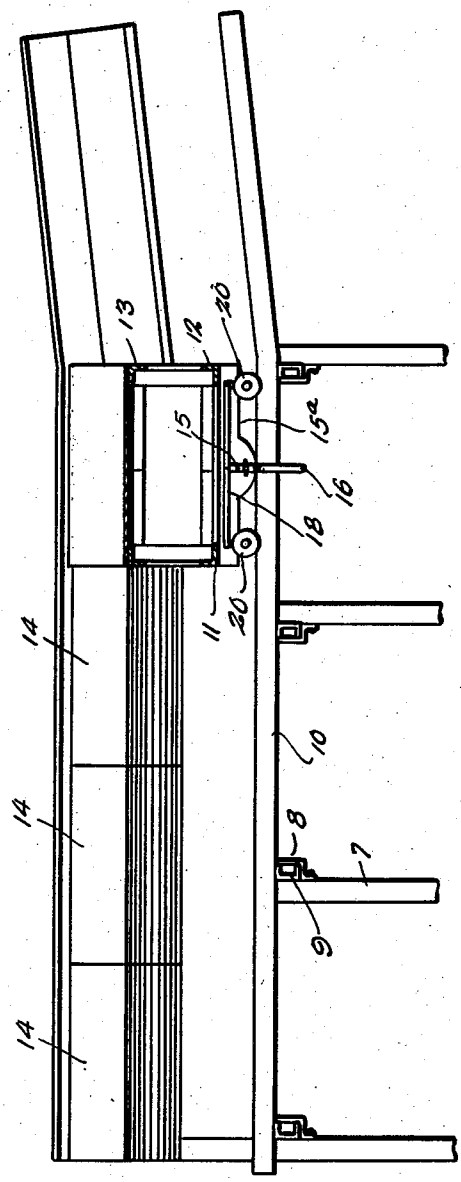
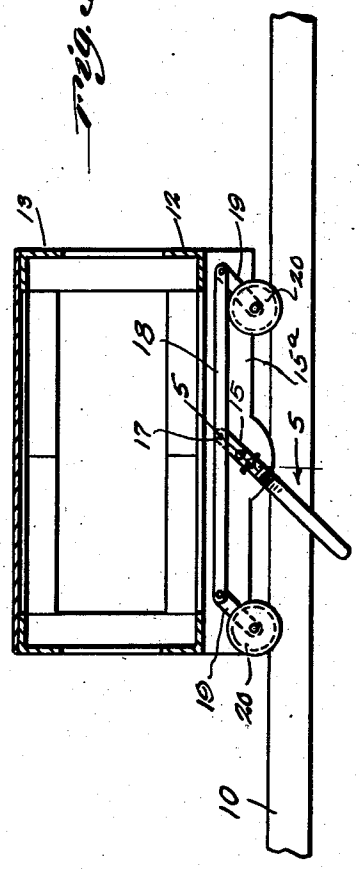


Fig. 3.



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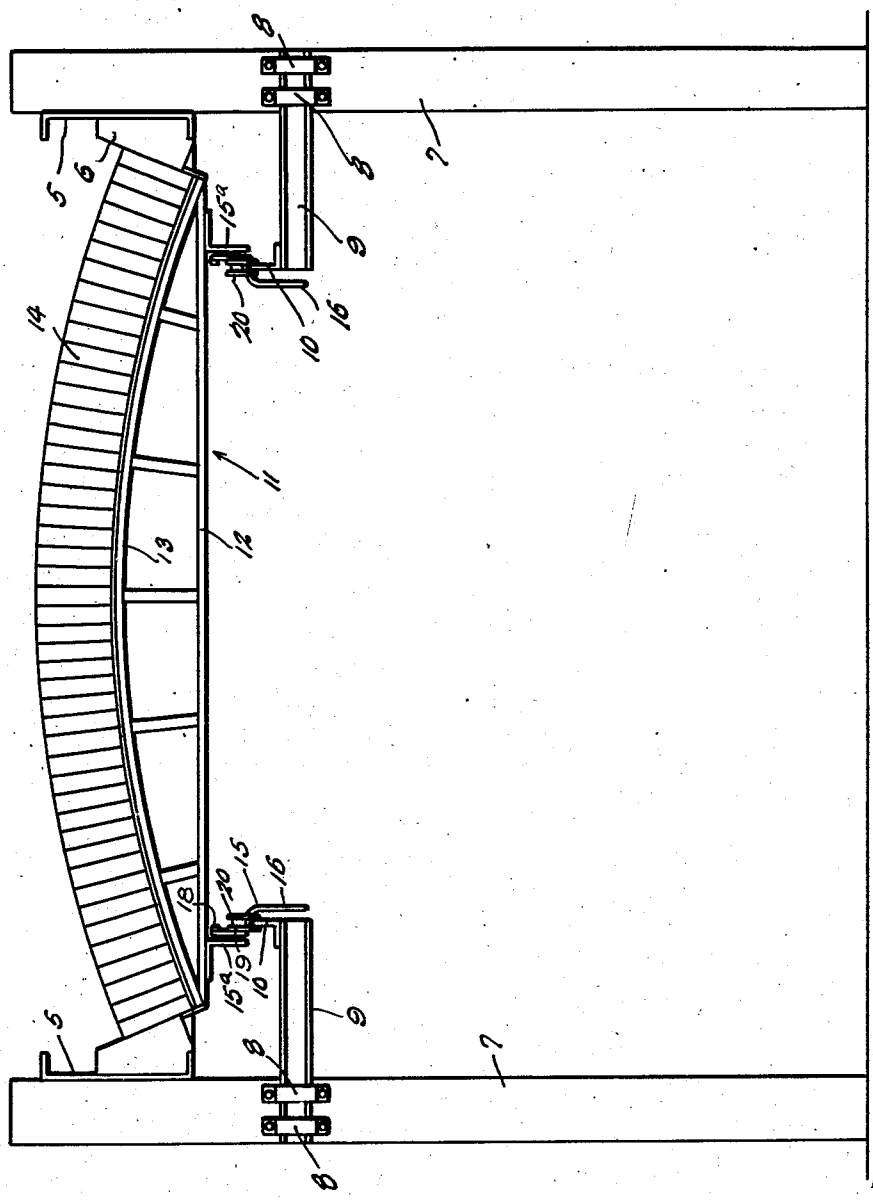


Fig. 2.

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ROOF CENTER

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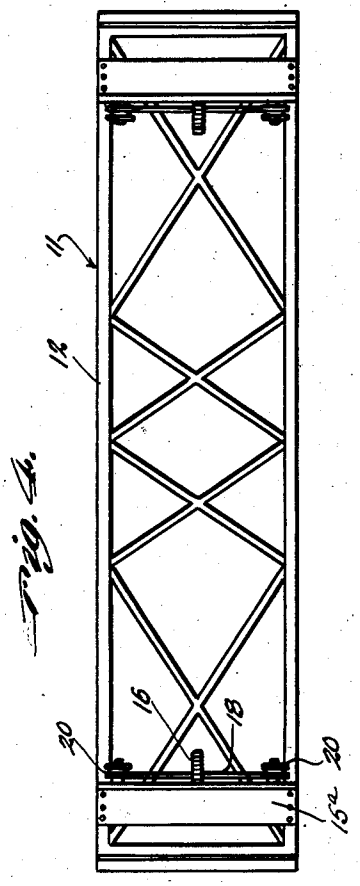


Fig. 4.

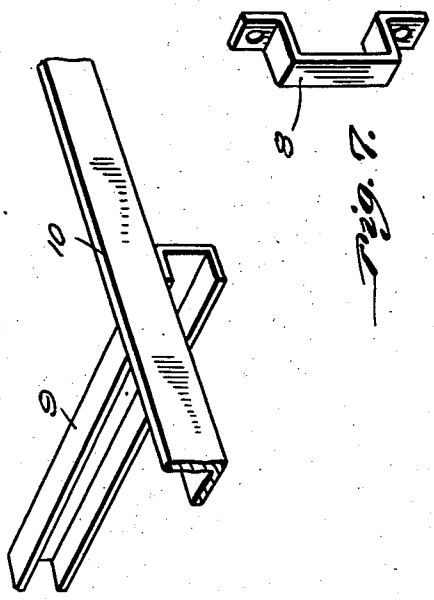


Fig. 6.

Fig. 7.

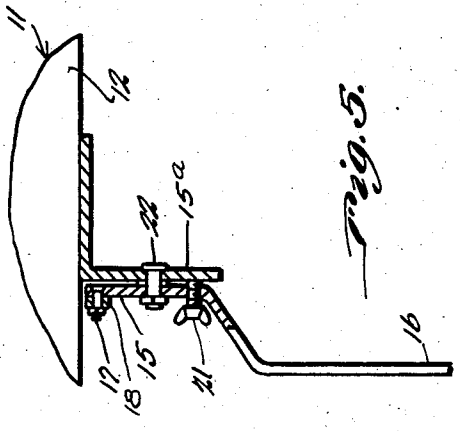


Fig. 5.

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UNITED STATES PATENT OFFICE

2,386,525

ROOF CENTER

Joseph S. White, Galena Park, Tex.

Application February 16, 1944, Serial No. 522,684

2 Claims. (Cl. 25—131.6)

This invention relates to new and useful improvements in center structures for use in constructing arched roofs such as are employed on open hearth furnaces.

The principal object of the present invention is to provide a center upon which a roof arch section can be constructed and from where it can be lowered and moved to an adjacent position for the construction of a second or further arch section.

Another important object of the invention is to provide a device for facilitating the construction of arched roofs, thus substantially reducing the cost of labor.

Another important object of the invention is to provide a device for permitting the more rapid construction of arched roofs or open hearth furnaces, thus permitting the hearth furnace to go back into production much quicker than would be possible through the old methods of constructing furnace roofs.

Other objects and advantages of the invention will become apparent to the reader of the following description.

In the drawings:

Figure 1 represents a fragmentary vertical sectional view through the center showing the same in the act of constructing roof arch sections.

Figure 2 is a side elevational view of the center showing the means for supporting the center as a roof section is being constructed thereon.

Figure 3 is an enlarged vertical sectional view similar to that showing the device in Figure 1.

Figure 4 is a bottom plan view of the center.

Figure 5 is a fragmentary detailed sectional view taken substantially on the line 5—5 of Figure 3.

Figure 6 is a fragmentary perspective view showing one of the track rails and the supporting means therefor.

Figure 7 is a perspective view of one of the U-shaped bracket clamps.

Referring to the drawings wherein like numerals designate like parts, it can be seen that numeral 5 denotes the usual side channeled beams for supporting skew backs 6, which serve as abutments for the roof construction.

The channeled beams 5 are supported by buckstays or steel columns 7 and on certain of these columns are U-shaped clamp elements or straps 8 for holding inwardly projecting bracket arms 9 in position as shown in Figure 2. These bracket arms are removable, but serve to support complementary rails 10 upon which the improved center generally referred to by numeral 11 is adapted to ride.

The center 11 consists of a rectangular-shaped frame 12 serving to support arch forming curved center bars 13 upon which the roof blocks 14 are to be set as suggested in Figure 2.

Each end of the frame 12 is bridged by an angle plate 15a, the depending flange of which carries a rockable hand lever 15, the same having an outstanding handle portion 16 at its lower end, while at its upper end is pivotally secured as at 17 to the intermediate portion of a bar 18 which is connected at its ends by pivotal links 19 to the axles of channeled rollers 20. Obviously, by swinging the hand lever 15 by the handle 16, the center 11 can be lifted and lowered with respect to the track rails 10 and this is desirable so that when a roof section has been constructed, the center 11 can be lowered and run along the rails 10 to an adjacent position where an adjoining roof section can be started. Obviously, when a roof section is to be started, the lever 15 is swung to the right (see Figure 3) for the purpose of elevating the center, this operation being required at each end of the center.

In order to hold the lever 15 in set position a set screw 21 is feedable through the lever 15 just below the fulcrum point 22 thereof and this screw is adapted to be fed against the depending flange of the adjacent angle plate 15 as is suggested in Figure 5.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is:

1. A roof constructing center for use on a pair of tracks comprising an elongated arch-shaped frame, pairs of wheels at opposite ends of the frame adapted to roll along said tracks and having axles, and means to mount said frame on said wheels for vertical adjustment relative thereto comprising a pair of hand levers pivotally mounted intermediate the ends thereof on opposite ends of said frame in depending position and independently swingable, and means swingably connecting the upper ends of the levers to the axles of the pairs of wheels at corresponding ends of the frame.

2. A roof constructing center for use on a pair of tracks comprising an elongated arch-shaped frame, pairs of wheels at opposite ends of the

frame adapted to roll along said tracks and having axles, and means to mount said frame on said wheels for vertical adjustment relative thereto comprising a pair of hand levers pivotally mounted intermediate the ends thereof on opposite ends of said frame in depending position and independently swingable, and means swingably connecting the upper ends of the levers to the axles of the pairs of wheels at corresponding ends of the frame, comprising links swingable in pairs about said axles and a pair of bars pivotally connected at the ends thereof to the pairs of links and pivotally connected intermediate the ends thereof to said levers.

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