

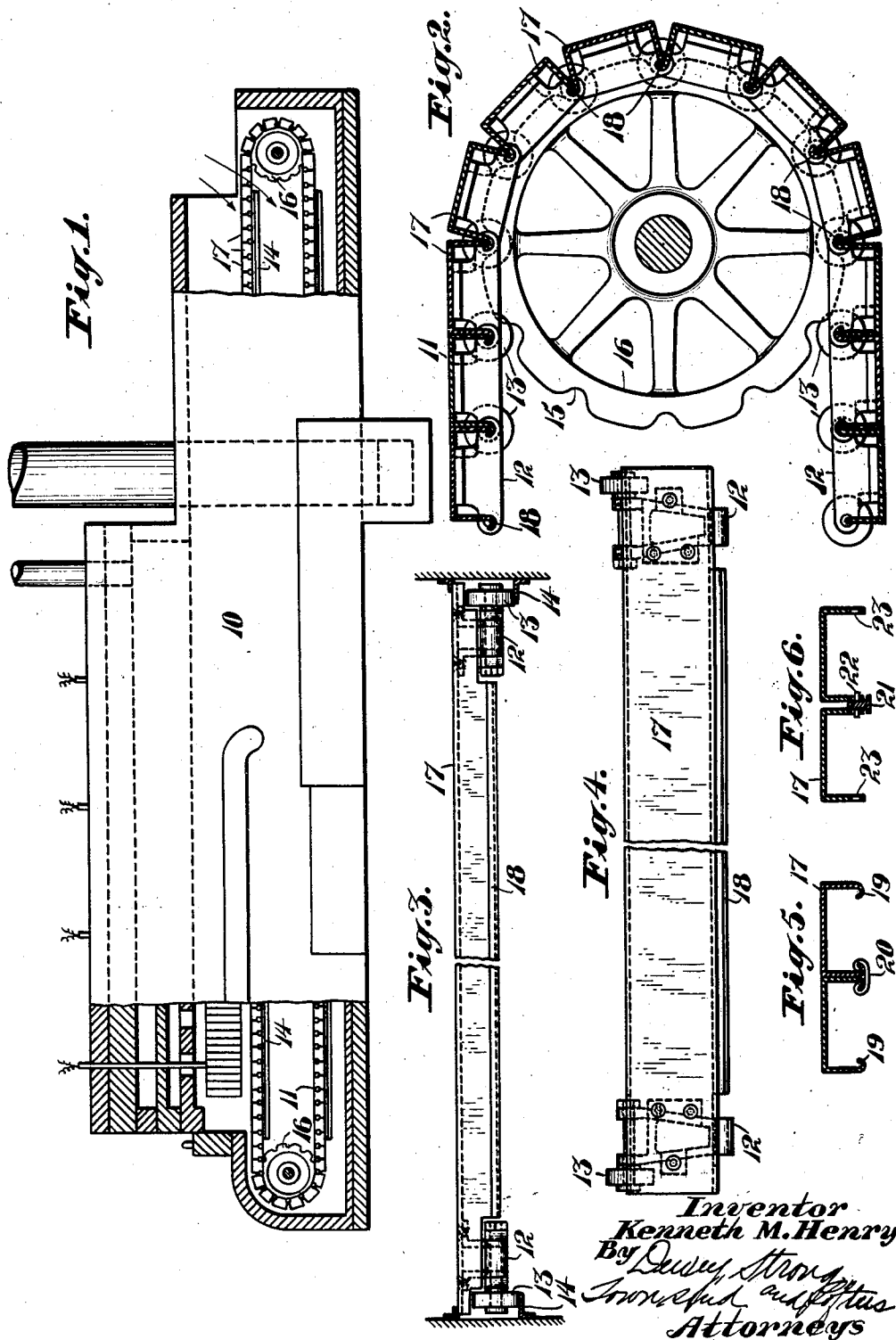
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PAN CONVEYER FOR FURNACES

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UNITED STATES PATENT OFFICE.

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PAN CONVEYER FOR FURNACES.

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To all whom it may concern:

Be it known that I, KENNETH M. HENRY, a citizen of the United States, residing at the city and county of San Francisco and State of California, have invented new and useful Improvements in Pan Conveyers for Furnaces, of which the following is a specification.

This invention relates to pan conveyers for furnaces.

In endless conveyers used in heat treating ovens, and particularly glass annealing lehrs, there is a considerable loss of heat, due to the circulation of air currents between the slats of the conveyer. It is the object of this invention to close this space between the slats to the end that such heat losses shall be overcome.

There are several ways of carrying out this object, three such being shown in the accompanying drawings, in which—

Fig. 1 shows a side elevation, partly in section, of a glass annealing lehr.

Fig. 2 shows a vertical sectional view of one end of a pan conveyer embodying my invention.

Fig. 3 shows a cross section of the upper run of the conveyer.

Fig. 4 shows a plan view of one of the slats.

Fig. 5 shows a cross section of a modified form of connecting means between the slats.

Fig. 6 shows a cross section of a further modification.

By way of illustrating the invention, I show an annealing lehr 10 fitted with an endless conveyer 11. These lehrs are heated at one end, the other end being open for effecting a gradual cooling of the articles.

As indicated by arrows, cold air enters the open end and passes between the slats of the conveyer, and thus gains entrance to the part of the lehr which is heated. Considerable loss of heat results therefrom.

The conveyer comprises articulated link sections 12, each section being preferably fitted with a roller 13 to ride upon a track 14 and to co-operate with teeth or notches

15 in the sprocket wheel 16. Opposite link sections are connected across by metal slats 17. Since these slats are required to pass around the sprocket wheels, they are ordinarily disconnected. However, in the present invention I connect these slats together in a manner to close the space between against the admission of air currents.

The preferred way of doing this is shown in Fig. 2, where it will be seen that each slat is in the form of a channel and one leg is provided with an outwardly curved flange 18 into which the leg of the adjacent slat fits.

Another way of accomplishing this is to provide both legs with inwardly curved flanges 19 and connect the flanges of adjacent legs together by means of a clip 20, as shown in Fig. 5.

A third way is to insert a filler 21 between adjacent slats and retain this filler in place by means of pins 22 extending into slots 23 in the legs of the channel-shaped slats, as shown in Fig. 6.

Various changes in the construction and arrangement of the several parts herein shown and described may be employed without departing from the spirit of my invention as disclosed in the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:—

1. A pan conveyer for furnaces comprising articulated link sections, channel-shaped slats connecting opposite sections together, connecting means between adjacent slats permitting articulation and closing the space between comprising a curved flange formed on a leg of each slat.

2. A pan conveyer for furnaces comprising articulated link sections, channel-shaped slats connecting opposite sections together and connecting means between adjacent slats permitting articulation and closing the space between and said connecting means comprising an outwardly curved flange formed on a leg of each slat, the leg of the adjacent slat being seated in said curved flange.

KENNETH M. HENRY.