(No Model.)

M. SWENSON.

ENDLESS CHAIN CARRIER.

No. 440,931. Patented Nov. 18, 1890.

FIG. 1.

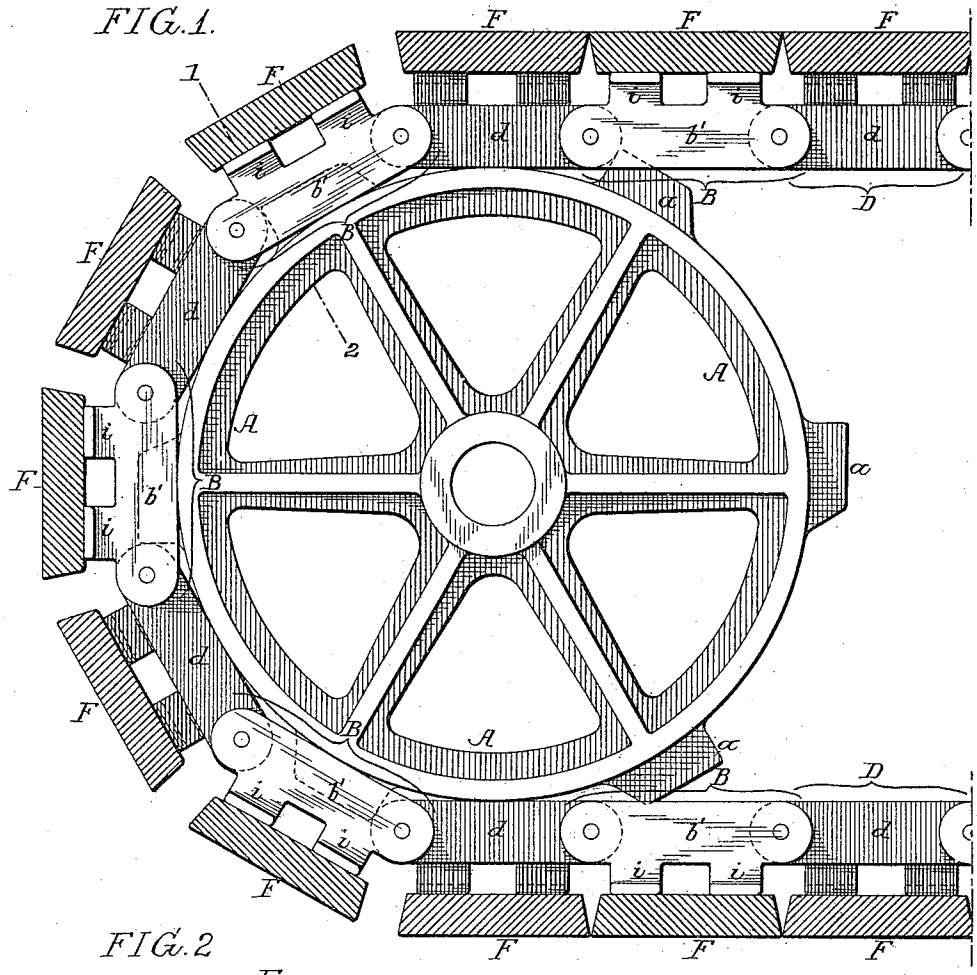


FIG. 2

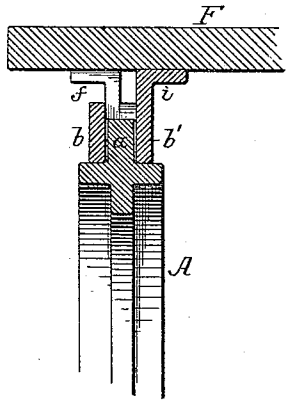
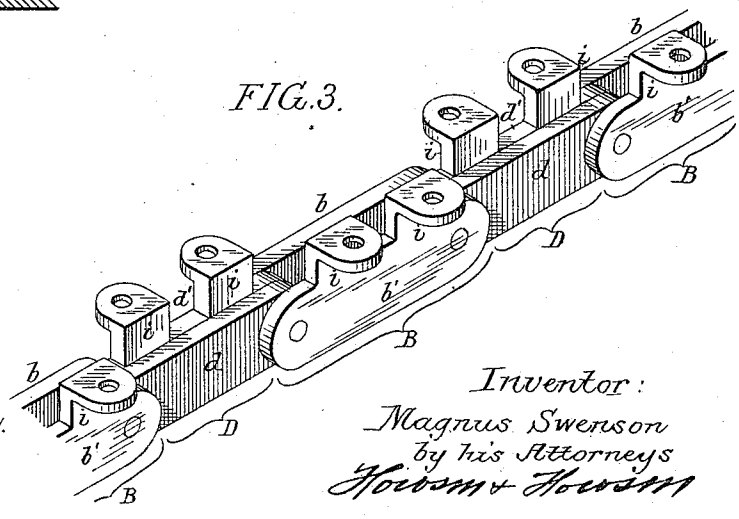


FIG. 3.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MAGNUS SWENSON, OF FORT SCOTT, KANSAS.

ENDLESS-CHAIN CARRIER.

SPECIFICATION forming part of Letters Patent No. 440,931, dated November 18, 1890.

Application filed August 8, 1890. Serial No. 361,464. (No model.)

To all whom it may concern.

Be it known that I, MAGNUS SWENSON, a citizen of the United States, and a resident of Fort Scott, Bourbon county, Kansas, have invented certain Improvements in Endless-Chain Carriers, of which the following is a specification.

My invention consists of a certain improvement in the construction of an endless-chain carrier driven by sprocket-wheels, the object of my invention being to so construct those links of the chain which engage with the teeth of the sprocket-wheel that the accumulation of trash in the sockets formed by the links for the reception of said sprocket-teeth will be prevented. This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 represents a side elevation of the sprocket-wheel and part of the endless-chain carrier driven thereby, the lags or strips of the carrier being shown in section. Fig. 2 is a transverse section on the line 1 2, Fig. 1; and Fig. 3 is a perspective view of part of one of the endless chains of the carrier.

In ordinary endless-chain carriers to be operated by sprocket-wheels the bars of the links are usually of uniform height. Hence the sockets formed by the links which receive the teeth of the sprocket-wheel are closed at the top by the lags or bars of the carrier, and in carriers of this class intended for use in sugar-mills or like work difficulty has been experienced, owing to the fact that trash gradually accumulates in the sockets, and, being compressed therein by the action of the teeth of the sprocket-wheel, causes the sockets to be gradually filled up, so that the chain is eventually cast from the wheel. In order to overcome this objection, I construct the chain in the manner shown in the drawings, on reference to which—

A represents the sprocket-wheel, having the usual teeth *a* for engagement with sockets formed in alternate links B of the chain, each of these links B consisting of inner and outer bars *b b'*, separated to the desired extent by the interposed ends of the intervening links D. The bar *b'* of each link B is higher than the bar *b* of said link, this additional height being in the present instance due to the presence of upwardly-projecting lugs *i*, to which the transverse bar or lag F of the carrier is secured, although, if desired, the bar *b'* may be throughout of a width greater than the bar *b*, so as to provide for the desired elevated support of the lag F. By this means a space *f* is formed between the top of the bar *b* of each link B and the bottom of the lag F, carried by said link, so that any trash which may enter the socket of a link can escape therefrom laterally through this passage and over the top of the bar *b*. Hence the choking of the sockets and the casting off of the chain are effectually prevented.

In the present instance the links D of the chain are composed of bars *d d'*, similar to the bars *b b'* of the links B, so that like bars may be used for either link; but it will be evident that the use of high and low bars in the links D is not necessary, nor is it necessary that said links should even be composed of two bars.

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

1. In an endless-chain carrier to be driven by a sprocket-wheel, the combination of the transverse bars or lags of the carrier, with chains having teeth-receiving links formed of bars, one of which is higher than the other and has the lag secured to it, whereby a lateral discharge-opening is provided between the top of the other bar and the projecting portion of the lag for the escape of trash from the socket of the link, substantially as specified.

2. In an endless-chain carrier to be driven by a sprocket-wheel, the combination of the transverse bars or lags of the carrier, with a chain having teeth-receiving links formed of bars, one of which has upwardly-projecting lugs to which the lag is secured, whereby lateral discharge-openings are provided between said lugs and between the top of the other bar and the projecting portion of the lag for the escape of trash from the socket, substantially as specified.

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

MAGNUS SWENSON.

Witnesses:

B. A. JOHNSTON,

CHAS. S. THOMPSON.