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BY A. P. C.

H. AUMUND
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Fig. 1

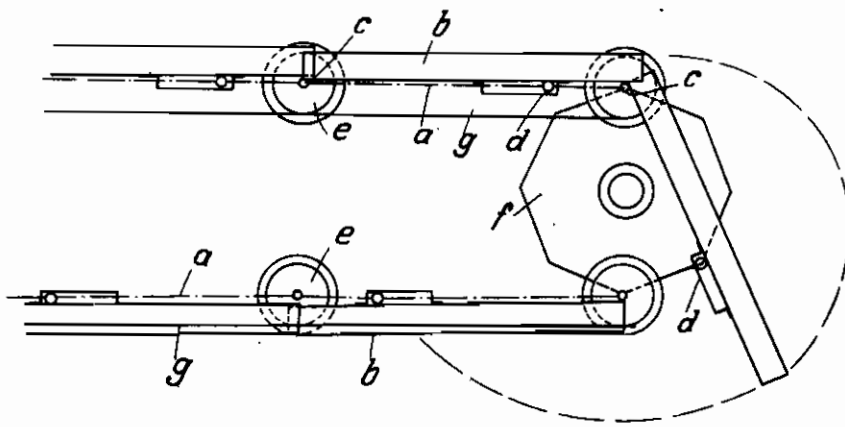
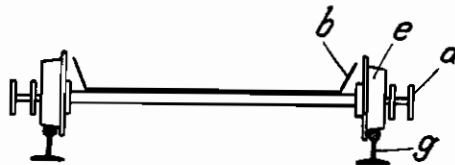


Fig. 2



Inventor:

H. Aumund.

By
Young, Emery & Thompson
Attorneys

ALIEN PROPERTY CUSTODIAN

CONVEYERS

Heinrich Aumund, Berlin-Zehlendorf, Germany;
vested in the Alien Property Custodian

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This invention relates to a conveyer of the plate or pan type.

The known conveyers of this class, usually fitted with plates having the same length as the links of the plate-supporting endless chain and dumping their load at the end of the working run, are open to the objection that their manufacture is expensive and the load-carrying means are heavy, require much sealing and have a relatively low output.

The invention eliminates these drawbacks by providing a conveying medium in which the load is also discharged over the end of the plates whose length can, however, be increased without regard to that of the chain links to a multiple thereof.

It has been proposed already to use plates which are approximately three times as long as the links of the supporting chain, but in such structures each plate is united with a chain link either at one end over its whole length or at both ends. The extension of the length of the plates beyond the length of a chain link in conveyers of this type can be effected only by letting the other end of the plates freely project. This manner of extending the plates beyond the length of a chain link is, however, limited, since the free projection of the plates beyond a certain distance will render them too heavy and subject the chain to excessive stressing.

For these reasons, the length of plates in such conveyers is restricted to approximately three times the length of a chain link, at the highest.

Compared with the known art, the plates in a conveyer according to the invention can be moved up and down at one end of the working run and are yieldably, for instance longitudinally movably, arranged relative to the chain toward the other end.

Owing to this novel attachment of the plates to the chain, the two fastening points for the

plates on the links can be spaced at will and plate lengths up to twelve times the length of a chain link may be used. This makes it possible for instance to build a conveyer having a plate length of about two meters and an output in excess of 2,000 cbm. per hour.

The invention is illustrated by way of example in the accompanying drawing, in which

Figure 1 is a side view of the load carrying means of a conveyer according to the invention provided with plates being four times as long as the links, and

Fig. 2 is a cross section thereof.

An endless drag or sprocket chain *a* supports plates *b* secured to the chain *a* at *c* which is supported by rollers *e*. *f* designates a sheave for the chain *a* and *g* the rails on which the rollers *e* move which may be attached to the links of the chain *a* or otherwise arranged.

To insure safe guiding of the chain over the sheave *f* in spite of the great length of the plates *b* longitudinal guides *d* are provided at suitable points on the underside of each plate and adapted to cooperate with pins secured to the chain *a*. During movement of the chain *a* over the sheave *f* the pin moves from the front part of the guide *d* to the rear thereof, as indicated in Fig. 1. Instead of providing each plate *b* with a longitudinal guide *d*, the arrangement may be such that the chain links are fitted with oblong holes at suitable points and the guide pin is attached to the plate.

The rollers *e* may be widely spaced without causing sagging of the chain *a* which runs smoothly during operation without any motion in the links.

The invention is of course not restricted to the embodiment shown and described but may be varied as to details without departing from the scope thereof.

HEINRICH AUMUND.