(Model.)

S. H. HOGGSON.

TYPE BELT.

No. 453,699. Patented June 9, 1891.

Fig. I.

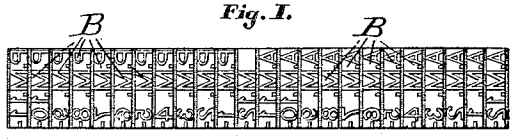


Fig. II.

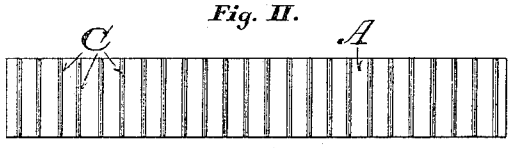
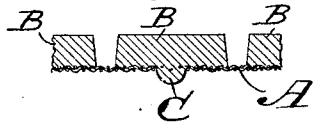


Fig. III.



Fig. IV.



Attest:

A H Cowen

F Bonville

Inventor:

Samuel H. Hoggson

by C D Mooby

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

UNITED STATES PATENT OFFICE.

SAMUEL H. HOGGSON, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO WILLIAM H. STEVENSON, OF SAME PLACE.

TYPE-BELT.

SPECIFICATION forming part of Letters Patent No. 453,699, dated June 9, 1891.

Application filed August 29, 1890. Serial No. 363,440. (Model.)

To all whom it may concern:

Be it known that I, SAMUEL H. HOGGSON, of St. Louis, Missouri, have made a new and useful Improvement in Type-Belts, of which the following is a full, clear, and exact description.

The improvement consists substantially as is hereinafter described and claimed, aided by the annexed drawings, making part of this specification and exhibiting the most desirable form of the belt, and in which—

Figure I is a face view of the belt; Fig. II, a view of the opposite or inner side of the belt; Fig. III, an edge elevation of the belt; and Fig. IV, a view upon an enlarged scale, showing a section of the belt in longitudinal section.

The same letters of reference denote the same parts.

My aim, in part, is to provide an inarticulated belt, or belt made in a continuous piece, capable of being moved more evenly and with more certainty than can be belts hitherto in use.

Another object is to provide a type-carrying belt that shall in its movement cause the types to come successively into position for use with more precision and regularity than the types of the ordinary type-carrying belt.

The improvement is especially adapted to rubber-type belts. A feature of the construction is the making of the belt in parts. The rubber type are mounted upon a continuous strip of a substance—such as a textile fabric—less liable to stretch and less liable to crack than is rubber. Another feature is the separation of the types, so that they are substantially disconnected from each other, thereby enabling the belt in its use to be turned more or less sharply around angular bearings without straining the projections of which the types, respectively, are part. An additional feature is the making of the projections which are used upon the inner side of the strip to insure the proper movement of the belt integral with the material upon the outer side of the strip.

The improvement is more fully carried out when the union between the projections and material is accomplished by extending the material through openings in the strip, and when the improvement is carried out to its fullest extent the material is extended through the meshes of the textile fabric of which the strip is preferably composed, and the projections upon the inner side of the fabric are respectively integral with the types upon the outer side of the fabric. I desire not to be restricted to a belt of any particular dimensions, for, while this belt is notably useful in contracted spaces, it can, so far as some at least of its features are concerned, be made of almost any size and used accordingly. Neither do I wish to be confined to a textile fabric in the construction of the strip, so long as the material employed for the strip is sufficiently flexible to serve as a belt and adapted to be provided with the projections upon its inner side, nor, again, to rubber in the formation of the types and of the projections, provided the substance used is adapted for printing and the types are separated from each other upon the belt or the belt is provided with the projections upon its inner side. It is preferable, however, to use a textile fabric for the strip, and to separate the types from each other upon the strip, and to make the types and their corresponding projections, respectively, integral and of rubber. For thereby a very desirable belt is obtained for use in mechanisms in which exactness of movement is essential. A time-dating stamp is a mechanism to which the present improvement is especially adaptable.

A represents a strip of textile fabric.

B B B represent the types upon the outer side of the strip.

C C C represent the projections upon the inner side of the strip. The bodies of the type can, in shape, be varied to suit the size and style of the type, and they can be constructed to form or be provided with any types or characters or other parts which it is desired to have applied to the belt and to be brought into use in its movement. The projections upon the inner side of the belt may also be variously shaped so long as they are respectively opposite the types and so long as they shall properly coact with the bearings over which the belt is worked in its use. The projections C enable the belt to be operated after the manner of a sprocket-wheel belt.

The separation of the types A enables the types, as they in the movement of the belt come into position for use, to be supported upon flat surfaces, and the belt at points between the types, respectively, to be bent more or less sharply over or around bearings more or less angular. By this means the belt is adapted for being moved with great regularity and surely and at the same time in a manner not calculated to endanger the integrity of the belt.

In Fig. III the broken lines D indicate a mode in which the belt can be bent at points between the types. The belt shown is especially adapted to a time-dating stamp. It renders it feasible to employ a comparatively compact mechanism for that purpose, and it enables two or more of the belts to be used upon the same shaft in perfect alignment with each other.

An additional feature of the belt is the separation from each other of the projections C. These projections preferably not only have no direct connection with each other, but they preferably are also made without anything like a fillet or lateral extension upon the inner side of the strip or band A, as shown.

I claim—

1. A type-carrying belt having its types upon the outer side and projections upon the inner side of a strip, said types and projections being respectively opposite each other, and said types and also said projections being substantially spaced apart from each other upon said strip, substantially as described.

2. A type-carrying belt having its types upon the outer side and projections upon the inner side of a strip, said types and projections being respectively opposite each other and integral, and said types and also said projections being substantially spaced apart from each other upon said strip, substantially as described.

3. A rubber-type belt having its types upon the outer side and projections upon the inner side of a textile fabric strip, said types and also said projections being substantially spaced apart from each other upon said strip, and the spaces between said projections being respectively opposite the spaces between said types, substantially as described.

Witness my hand this 25th day of August, 1890.

SAMUEL H. HOGGSON.

Witnesses:
C. D. MOODY,
A. BONVILLE.