No. 850,002. PATENTED APR. 9, 1907.

E. A. HOUCHIN & A. HUBER.

CONVEYER BELT.

APPLICATION FILED APR. 27, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

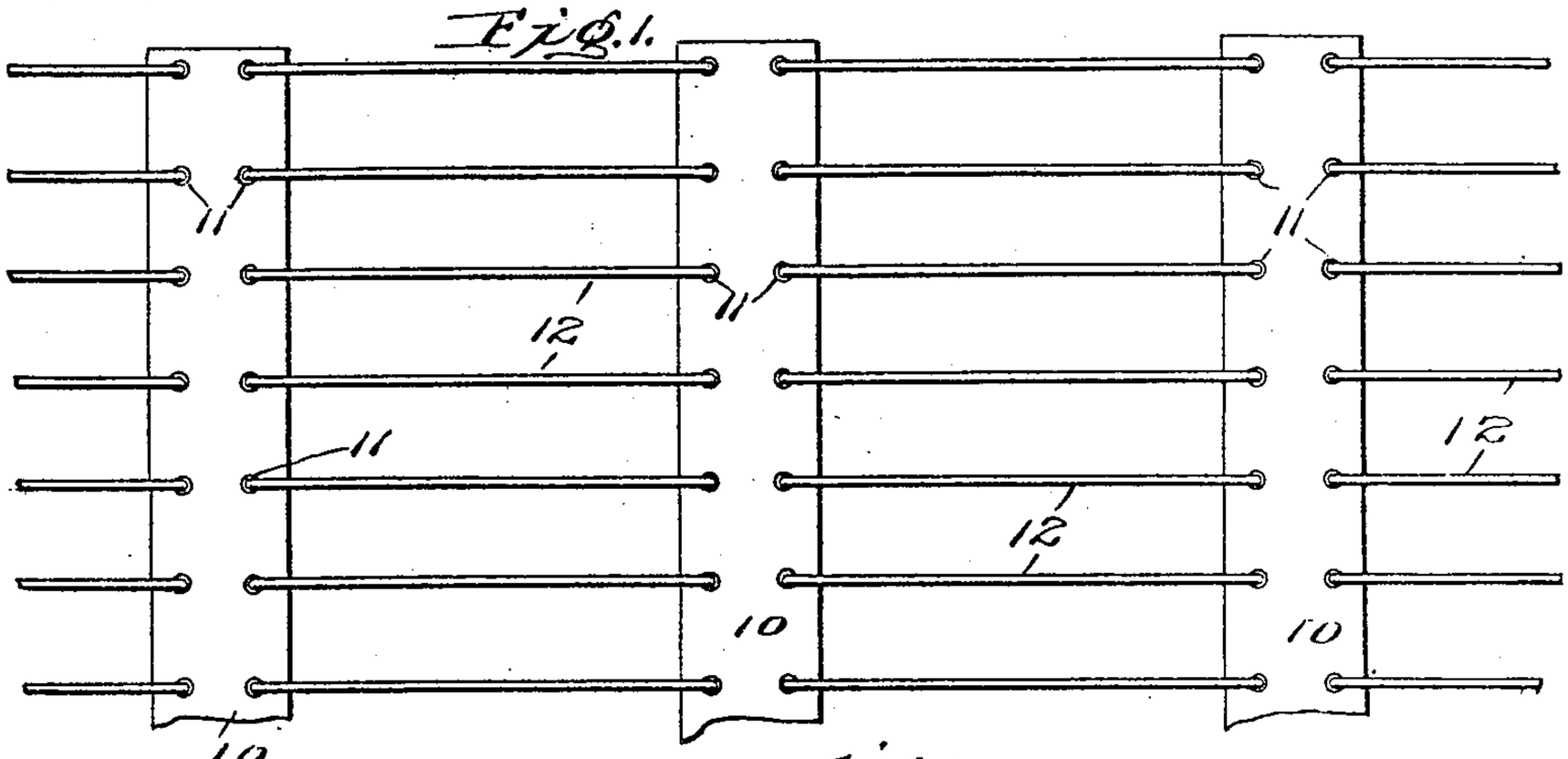


Fig. 3.

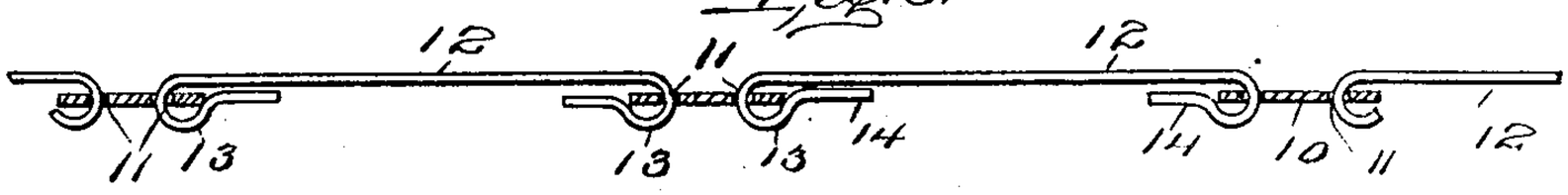
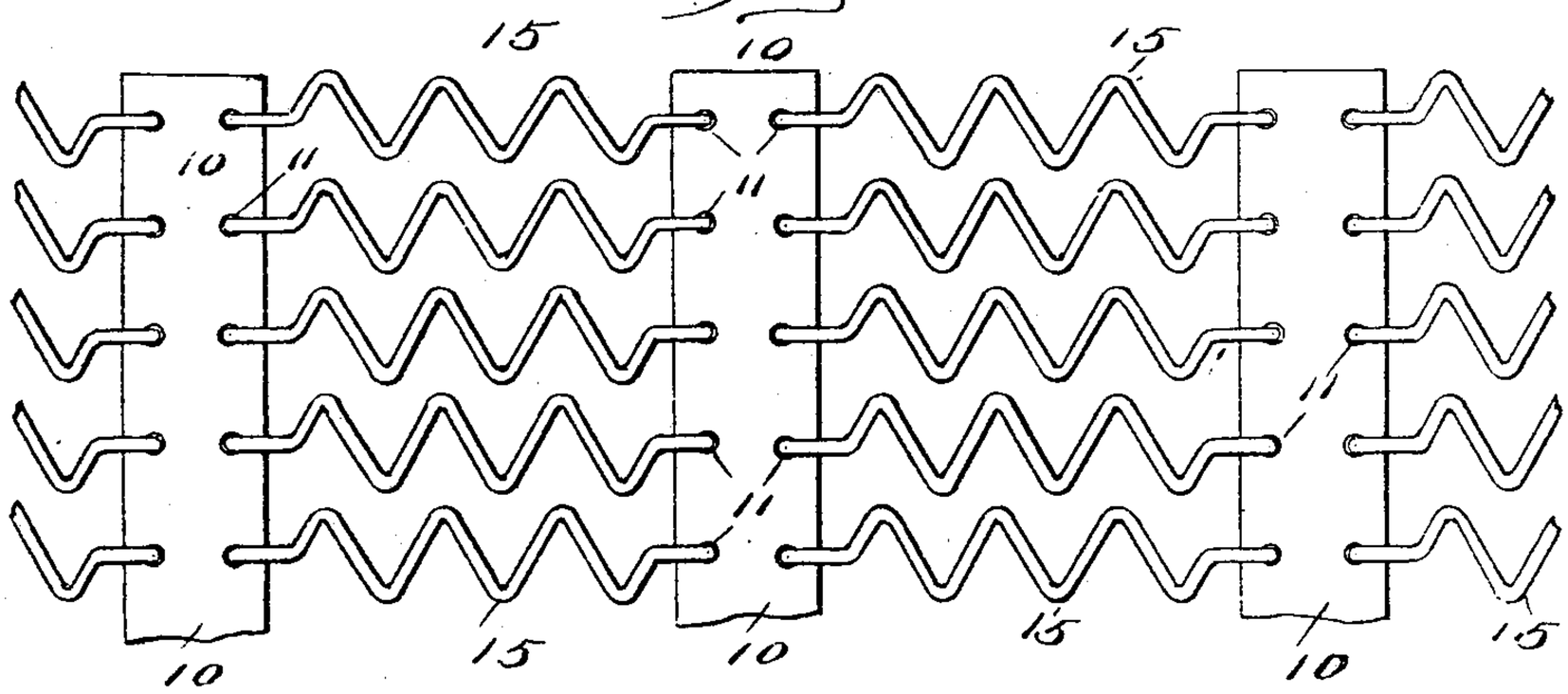


Fig. 2



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2 SHEETS—SHEET 2.

Fig. 6

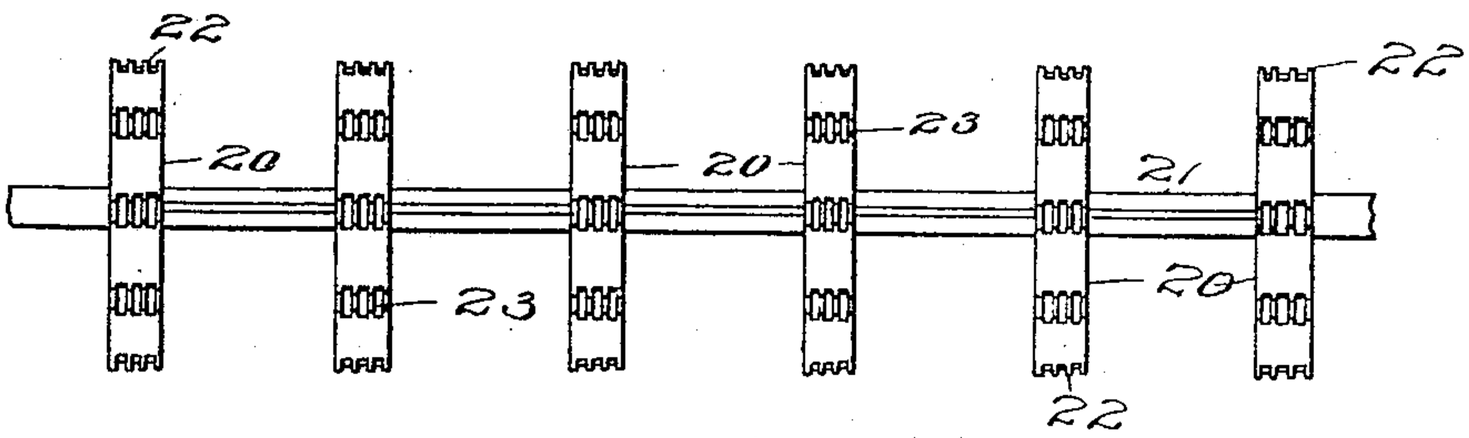


Fig. 7.

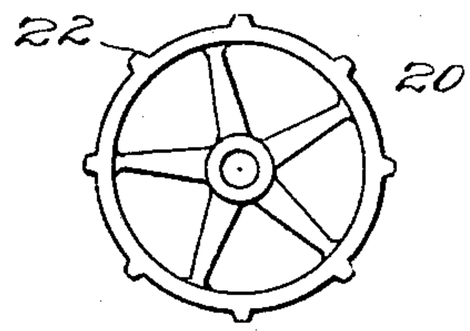


Fig. 4.

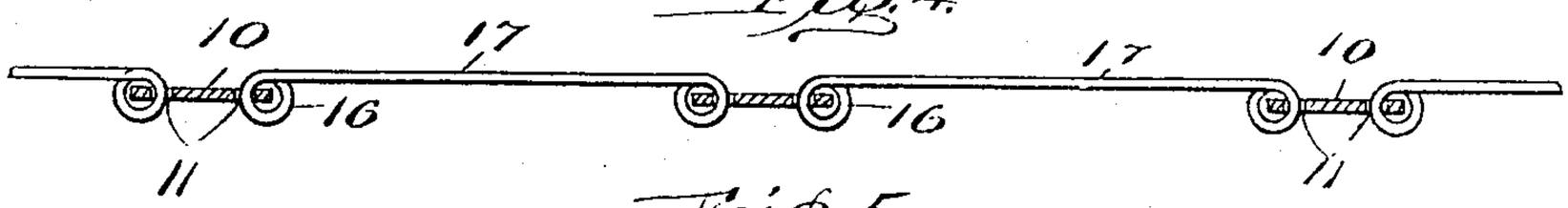
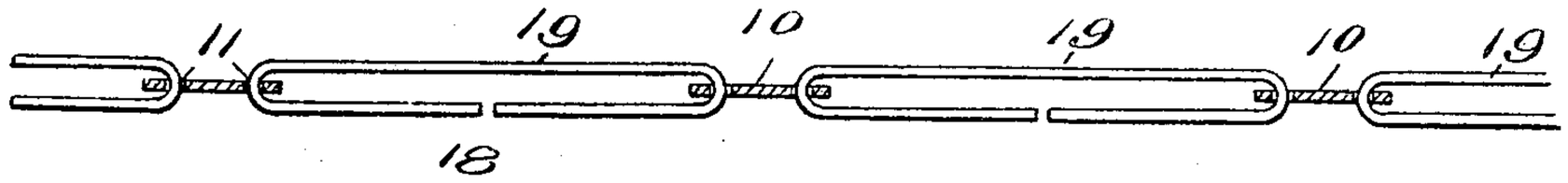


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CONVEYER-BELT.

No. 850,002. Specification of Letters Patent. Patented April 9, 1907.

Application filed April 27, 1906. Serial No. 314,095.

To all whom it may concern:

Be it known that we, ERNEST A. HOUCHIN and ANTHONY HUBER, citizens of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Conveyer-Belts; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to conveyer-belts, and while primarily designed for use in association with a soap-drier is applicable with equally satisfactory results to other devices.

The object of the invention is to provide a conveyer-belt of new and improved form, embodying improved features of economy, strength, and efficiency.

A further object of the invention is to provide a conveyer-belt which when used in very wide widths is not affected by a central lag.

A still further object of the invention is to provide a conveyer-belt embodying semirigid spaced strips extending transversely entirely across the belt and connected by rods engaging the adjacent edges of the strips and connecting the said strips pivotally to each other in series.

A further object of the invention is to provide a conveyer-belt having semirigid spaced strips extending transversely of the belt and connected by rods provided with resilient portions whereby the belt becomes slightly resilient in use.

With these and other objects in view the invention comprises certain novel constructions, combination, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a top plan view of the improved conveyer-belt. Fig. 2 is a top plan view of the conveyer-belt embodying connecting-rods of slightly-different conformation. Fig. 3 is an edge view of the improved conveyer-belt. Fig. 4 is an edge view of the conveyer-belt with the rods attached to the strips in slightly-different manner. Fig. 5 is an edge view of the conveyer-belt with rods of slightly-different form. Fig. 6 is a view in side elevation of a shaft provided with sprockets arranged for operation in association with the improved belt. Fig. 7 is a view of one of the sprockets in end elevation.

Like characters of reference designate corresponding parts throughout the several views.

The conveyer-belt forming the subject-matter of this application comprises semirigid strips 10, preferably of sheet metal and of the length equal to the transverse extent of the conveyer-belt. The strip 10 is provided along each side and adjacent the edges with spaced openings 11, wherein are pivotally secured rods 12 in any approved manner, as by forming loops 13 in the ends of said rods and inserting them through the said openings 11 and bending the inserted ends 14 backwardly in juxtaposition to the main portion of the rod 12. The rods 12 are of equal length, whereby the strips 11 are maintained at equally-spaced distance each with the other and capable of angular movement relative thereto by means of the pivoted connection of the rods with the strips. Instead of forming the main rod portions straight, as shown in Fig. 1, they may be crimped, as shown at 15 in Fig. 2, whereby the said rods are capable of longitudinal expansion and contraction under the action of the operating mechanism. Instead of turning the ends, as at 14, backwardly along the main rod portions, as shown in Fig. 3, the ends may be curled, as at 16, to form a substantially circular loop, as shown in Fig. 4, with the end abutting the main portion 17 of the rod. Another formation of the rods is shown in Fig. 5, wherein the ends 18 of the rods 19 after being inserted through the openings 11 of the strips are bent backwardly in substantial parallelism with the main portion 19 of the rods.

While the conveyer-belt here shown may be used and operated in association with rollers and sprockets of various forms, it is found desirable to employ a plurality of sprockets, as 20, spaced upon a shaft 21. The sprockets 20 are provided with teeth or lugs 22, proportioned and positioned upon the sprocket to engage between the rods of the belt and bear against the strips 10, and when positively rotated will move the conveyer-belt in the usual well-known manner. For use in a soap-drier it is found highly desirable to provide the sprockets with openings 23 between the points 22 and extending entirely through the rim of the sprocket, whereby any soap-sheets which may fall through the conveyer-belt and to be carried thereby upon the sprocket will be by the

rods forced through the openings and will not interfere with the proper operation of the belt by irregularly enlarging the circumference of the sprocket. While the sprockets mentioned are found desirable for operation in connection with a soap-drier, it is of course obvious that they may be used, as described, for various other purposes and that changes may be made in said sprockets dependent upon the use to which the conveyer is put.

What we claim is—

1. A conveyer-belt comprising semirigid strips, a plurality of spaced rods extending longitudinally of the belt and connecting the strips with the spaces between of greater width than the strips.

2. A conveyer-belt comprising semirigid strips provided with spaced openings along opposite edges, a plurality of spaced rods extending longitudinally of the belt, and having their ends hooked through the spaced openings, and extending backwardly along and adjacent to the rods.

3. A conveyer-belt comprising semirigid strips, a plurality of spaced rods extending longitudinally of the belt and connecting the strips and with the ends of the rods bent backwardly along and adjacent to the rod and with the spaces between greater than the width of the strips.

4. A conveyer-belt comprising semirigid strips provided with spaced openings along opposite edges, a plurality of spaced rods extending longitudinally of the belt and having their ends hooked through the spaced openings and extending backwardly along and adjacent to the rods and with the spaces between of greater width than the strips.

5. In a conveyer-belt, a plurality of semirigid bars extending transversely entirely across the belt, and spaced apart longitudinally of the belt, a plurality of links pivotally connected to opposite sides of the bar, and provided with curves disposed between the bars.

In testimony whereof we affix our signatures in presence of two witnesses.

ERNEST A. HOUCHIN.
ANTHONY HUBER.

Witnesses:
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