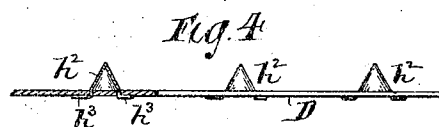
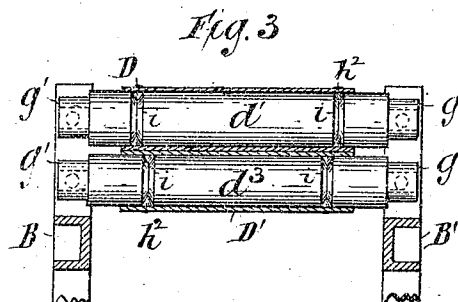
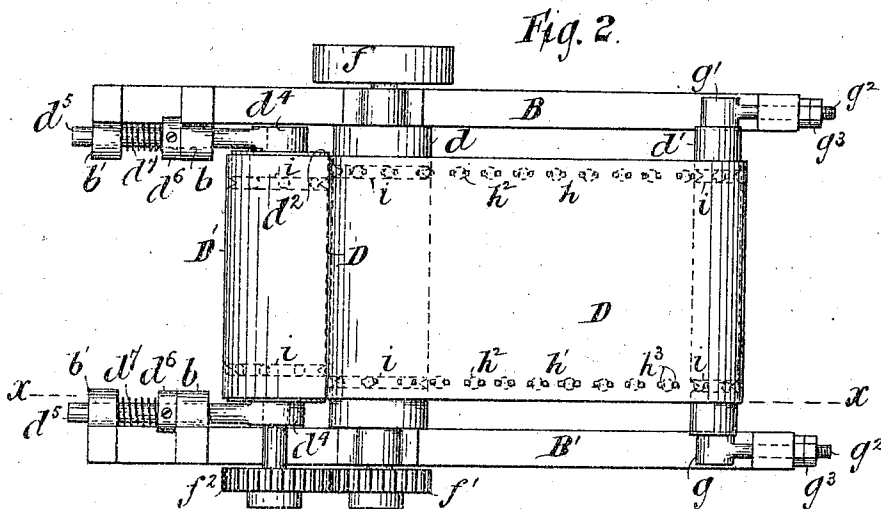
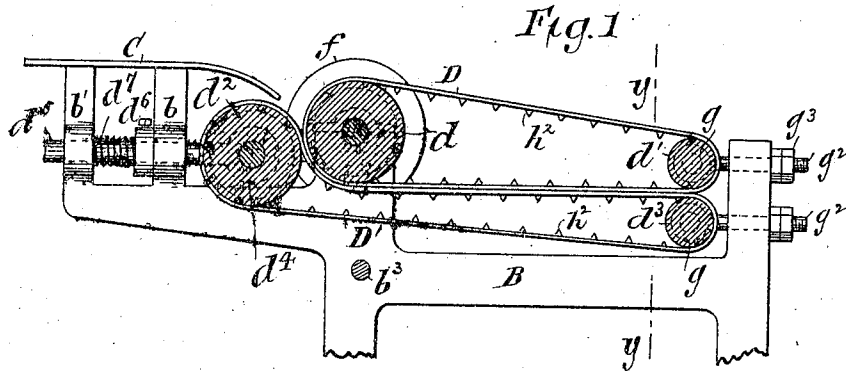


(No Model.)

S. JACOBY.
CONVEYER BELT.

No. 502,041.

Patented July 25, 1893.



Witnesses
Geo. Wadman
John M. Daily

Inventor
Sigmund Jacoby,
By his attorney,
Philip J. O'Reilly.

UNITED STATES PATENT OFFICE.

SIGMUND JACOBY, OF NEW YORK, N. Y.

CONVEYER-BELT.

SPECIFICATION forming part of Letters Patent No. 502,041, dated July 25, 1893.

Application filed January 26, 1893. Serial No. 459,761. (No model.)

To all whom it may concern:

Be it known that I, SIGMUND JACOBY, of the city, county, and State of New York, have invented a new and useful Improvement in Belts for Feeding Purposes, of which the following is a specification.

The object of my invention is to provide means for preventing the tendency of woven endless belts employed for feeding purposes, to move sidewise on their supporting rollers. This lateral movement results chiefly from the spiral formation of the threads common in said belts. Flanged rollers and other devices have been employed to prevent this movement, but without success.

My improvement consists in providing said belts with one or more rows of studs arranged in line at intervals longitudinally thereof, and adapted to enter and loosely fit annular grooves formed in the supporting rollers.

In the accompanying drawings, Figure 1 is a vertical section at the line $x x$, Fig. 2, of a pair of endless feed belts and their supporting rollers, constructed according to my improvement, the said parts being shown mounted in a position for use. Fig. 2 is a plan of the same. Fig. 3 is a transverse vertical section taken at the plane of the line, $y y$, Fig. 2; and Fig. 4 is an enlarged side elevation, partly in section, of a portion of a belt.

$B B'$, are two side frames united by a brace, b^3 , and secured to a table or other support.

C , is a feed table arranged in any suitable manner.

$D D'$, are two endless feed belts of canvas or other suitable material, each woven to form a continuous and seamless belt of the proper length. These belts are respectively mounted on rollers, d, d' , and d^2, d^3 , and serve to convey material fed between them, from the table C , to a receptacle beneath the rolls, d', d^3 , and suitable for the subsequent treatment of the material. The rollers, d, d^2 , are preferably faced with rubber or other elastic material, and the journals of these rollers are each mounted in a yielding support, d^4 , having a stem, d^5 , fitted to slide in lugs, $b b'$, extending from the frames, B, B' .

d^6 is a collar adjustably secured to the stem, d^5 , by a set screw and is acted on by a coil spring, d^7 , to hold the belts, D, D' , in proper contact normally. The roller, d , is detach-

bly journaled in the frames, B, B' , and is provided with a driving pulley, f , and a gear wheel, f' ; the latter engaging with a gear wheel, f^2 , attached to a journal of the roller, d^2 , by which means the two rollers and belts are caused to travel in unison. The rollers, d', d^3 , are arranged vertically in line and are each journaled in bearings, g, g' , having stems, g^2 , fitted to slide in upright extensions of the frames, B, B' .

g^3 , are nuts for securing the stems, g^2 , in position after the belts have been stretched to the requisite degree of tension.

h, h' , are two rows of guide studs, h^2 , secured at suitable intervals along the inner surfaces of the belts, D, D' , adjacent to their edges, the studs of one row being arranged to alternate with those in the other row, as shown in Fig. 2, where it will be seen that the studs of one row, h , are opposite spaces between the studs in the other row, h' . By this arrangement, intermediate portions of the belt between the studs of one row are secured from lateral motion when passing around the rollers by means of the studs in the other row. These studs may be in the form of hollow cones of sheet metal secured to the belts by means of prongs, h^3 , extending from the bases of the cones through the belts and clinched, as shown in Figs. 2 and 4.

The rollers, d, d', d^2 , and d^3 , are provided with annular grooves, i , corresponding in angular form and location with those of the studs, h^2 .

I claim—

1. An endless feed belt containing a row of studs arranged in line along and adjacent to each of its side edges, the said studs being adapted to enter and fit annular grooves contained in the supporting rollers for the belts, and the studs of one row, as h , being arranged to alternate in position with the studs of the other row, as h' , substantially as described.
2. An endless feed belt having the guide studs, h^2 , in the form of hollow cones secured to the belts by means of prongs, h^3 , extending from the bases of the cones through the belts and clinched, substantially as described.

SIGMUND JACOBY.

Witnesses:

PHILIP J. O'REILLY,
JAMES S. GREVES.