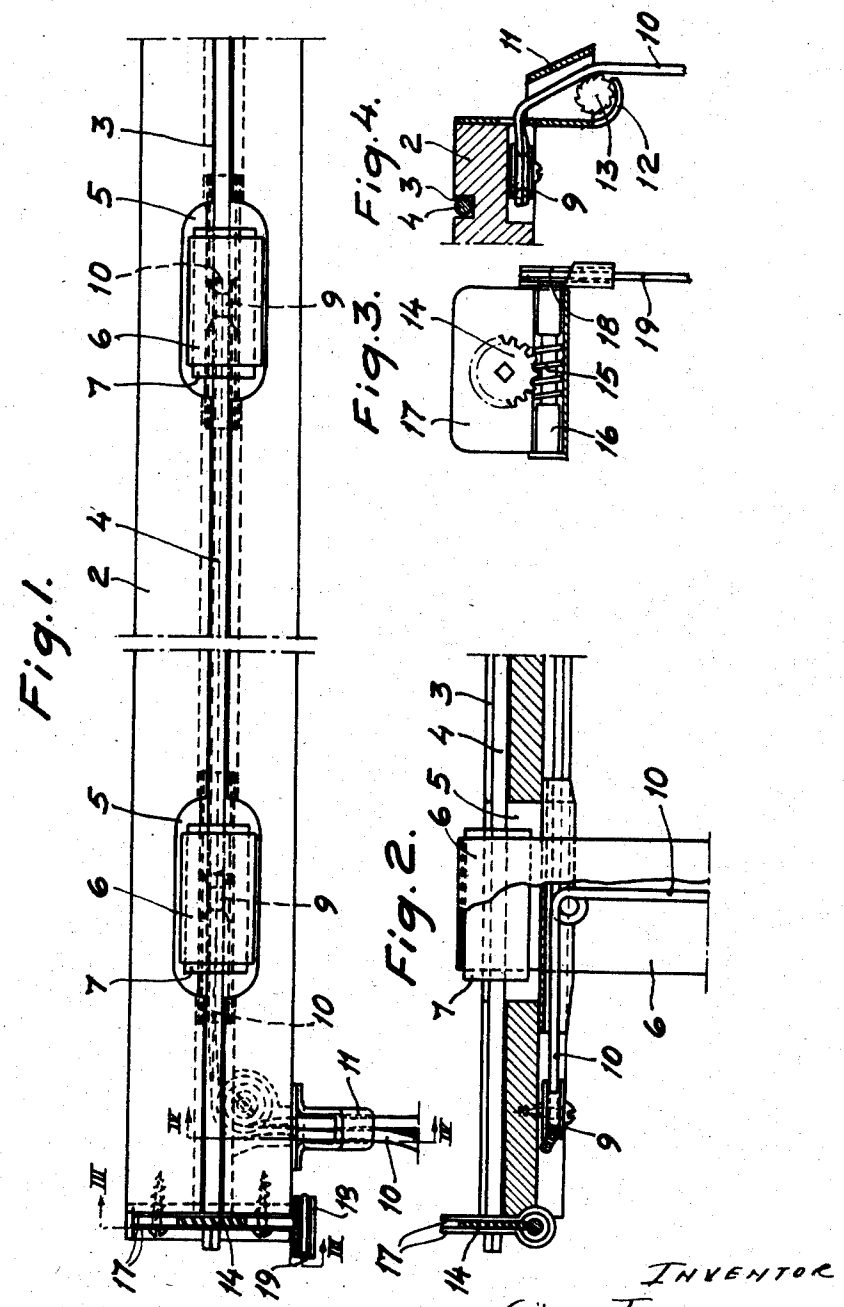
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DEVICE IN VENETIAN BLINDS OR THE LIKE

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INVENTOR
GÖTE JOHANSSON

By:
Haseltine, Lake & Co.
AGENTS

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DEVICE IN VENETIAN BLINDS OR THE LIKE

Göte Johansson, Nykoping, Sweden

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This invention relates to an arrangement in Venetian blinds of the type in which the slats are supported by ladder tapes extending laterally to the same on either side thereof and secured at the top and the bottom to head and bottom rails, whereby the slats can be caused, by influence of the tapes, to assume any desired angle of inclination, all for the purpose of completely or partly preventing the light from passing between them. The main feature of the invention is that a longitudinally extending shaft is loosely mounted in the head rail, on which shaft the tapes carrying the slats are suspended, and that friction surfaces or the like are so arranged on the shaft that the tapes are carried along by the friction surfaces due to their rotary motion when the shaft is caused to rotate in one direction or the other. According to the invention, one end of the shaft may be provided with a toothed wheel meshing with an endless screw or the like, and a rope sheave or the like may be secured on the screw, so that by actuation of the rope sheave, a rotary movement may be imparted to the toothed wheel and accordingly also to the shaft.

The accompanying drawing illustrates an embodiment of the device according to the invention.

Fig. 1 is a top view of the blind.

Fig. 2 is a vertical section through a portion of the blind.

Fig. 3 shows a section along the line III—III in Fig. 1 and

Fig. 4 is a section along the line IV—IV in Fig. 1.

Referring now to the drawings, the numeral 2 designates a head rail intended to be secured for instance above a window and having in its upper portion a longitudinally extending groove 3 accommodating a shaft 4. The head rail 2 also has bores 5 arranged centrally relatively to the shaft 4 and disposed directly in front of respective ladder tapes 6, which support the slats forming the blind. A friction roller 7, made for instance of rubber, is provided on the shaft and in each of the bores. Preferably the rollers should be grooved in order to prevent the tape, which is stretched by the slats, from gliding on the roller when the shaft is rotated. In the lower portion of the head rail is a longitudinally extending groove 8, accommodating the cords 10, which run a known manner against and over guiding rollers 9 to lower and raise the blind. The cords 10, which run through holes in the slats and have their ends fastened to a bottom rail, have their free ends running through a collecting funnel 11. In the lower portion of the latter there projects a hook member 12, which prevents a wheel 13, loosely arranged in the funnel and provided with lateral grooves, from falling out of the funnel. Said wheel, which is disposed below the cords 10, will automatically follow the cords upwards into the converging portion of the funnel and block the cords against the walls

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of the same when, after raising of the slats, the free ends of the cords are brought towards vertical position, i. e. into contact with the wheel. In order to release the cords from engagement with the wheel, the cords are brought outwards to contact the downwards converging outer wall of the funnel, the wheel 13 falling down on the hook member 12 and being released from the cords.

In one end of the blind there is secured on the shaft 4 a toothed wheel 14 engaging with a worm 15 on a shaft 16. The wheel 14 and the shaft 16 are journalled in a housing 17. Secured to one end of the shaft 16 is a rope sheave 18, over which a cord 19 is arranged, and by means of said cord the rope sheave and accordingly also the shaft 4 with the friction rollers 7 can be rotated. When the cord 19 is pulled in one direction or the other, the shaft 4 with the friction rollers 7 will rotate in one direction or the other, one half of the tapes 6 being raised and their other half being lowered, or vice versa, whereby the angular position of the slats is changed.

The invention is not confined to the embodiment described in the text and illustrated in the drawings, but may be varied in many ways with respect to its details without abandoning the inventional idea. The friction rollers may be used also in case the device comprises more than one shaft.

Having now described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a Venetian blind having a head rail, ladder tapes suspended from the head rail, and horizontal slats supported on the ladder tapes, a groove extending throughout the length of the head rail in the upper surface thereof, openings in the head rail communicating with said groove and extending to the bottom surface of the head rail each providing a passage for a ladder tape, a shaft lying loosely in the groove, friction rollers fixed on the shaft each in alignment with one of the openings, the ladder tapes being looped over the rollers, and means for rotating the shaft in either direction.

2. A device according to claim 1, characterized in that the friction rollers are corrugated.

GÖTE JOHANSSON.

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