

No. 638,515.

Patented Dec. 5, 1899.

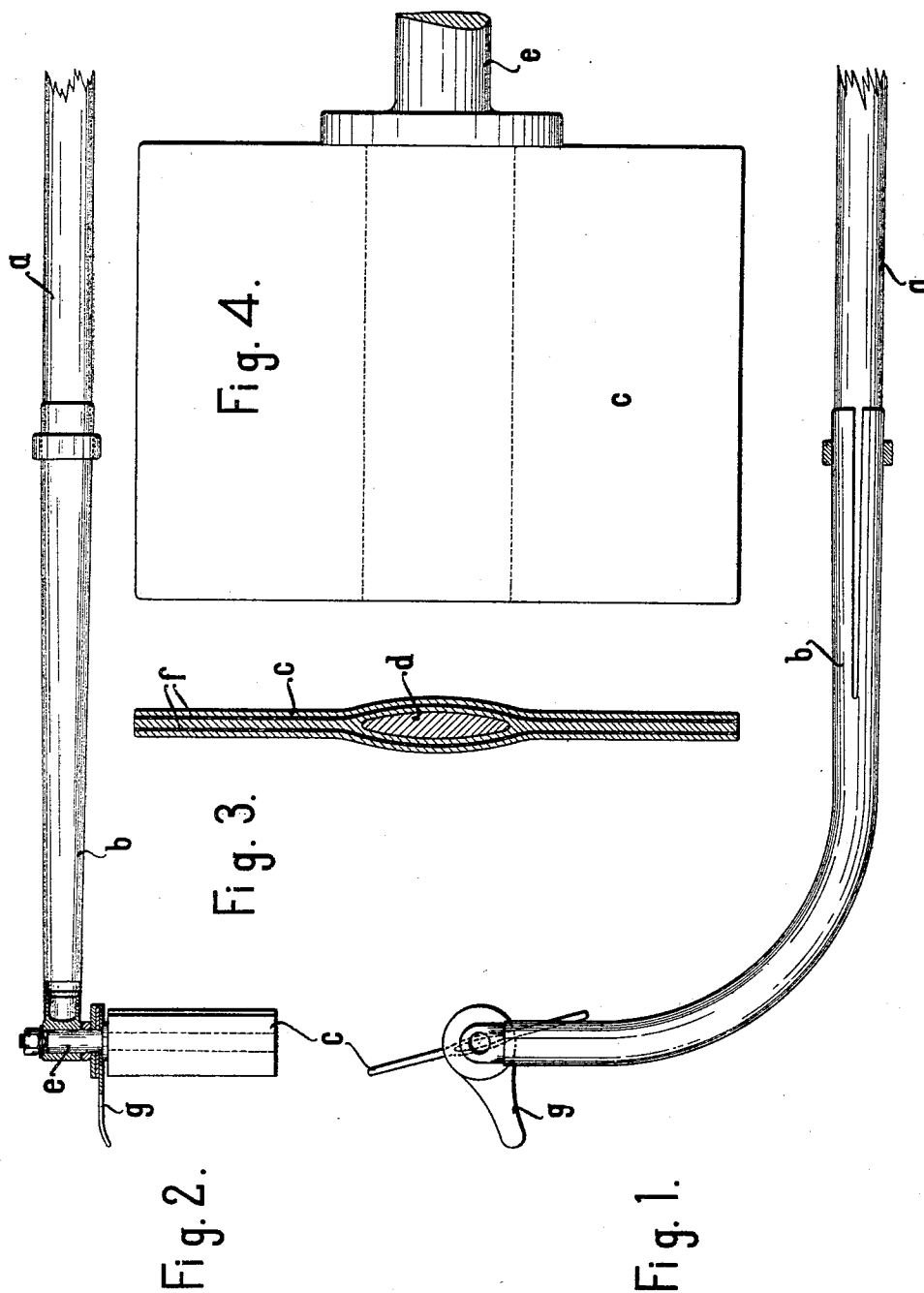
C. KOCH.

DEVICE FOR RUNNING BELTS ONTO PULLEYS.

(No Model.)

(Application filed June 8, 1899.)

2 Sheets—Sheet 1.



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No. 638,515.

Patented Dec. 5, 1899.

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DEVICE FOR RUNNING BELTS ONTO PULLEYS.

(Application filed June 6, 1899.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 5.

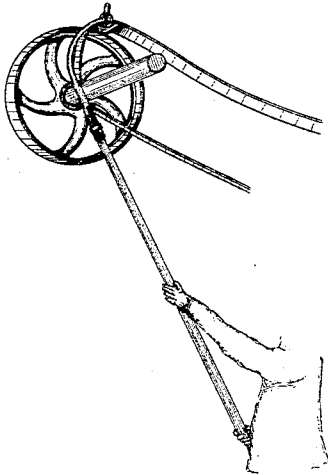


Fig. 6.

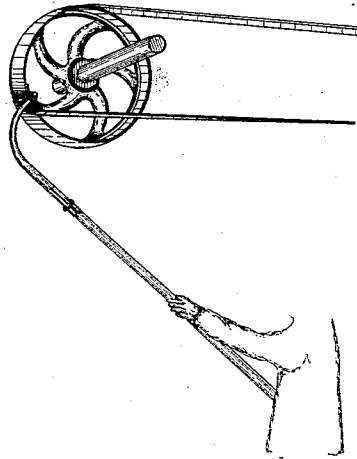
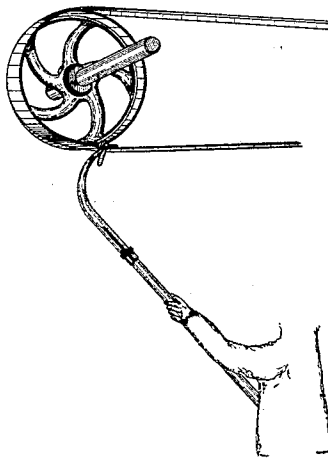


Fig. 7.



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UNITED STATES PATENT OFFICE.

CASPAR KOCH, OF ALTENDORF, GERMANY, ASSIGNOR TO FRIED. KRUPP,
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DEVICE FOR RUNNING BELTS ONTO PULLEYS.

SPECIFICATION forming part of Letters Patent No. 638,515, dated December 5, 1899.

Application filed June 6, 1899. Serial No. 719,522. (No model.)

To all whom it may concern:

Be it known that I, CASPAR KOCH, a citizen of the German Empire, residing at Altendorf, near Essen-on-the-Ruhr, Germany, have invented certain new and useful Improvements in Devices for Running Belts onto Pulleys, of which the following is a specification.

My invention has reference to improvements in devices for running belts onto pulleys by means of fingers projecting laterally from a holder and introduced between the face of the pulley and the belt, the finger being carried along by friction on the pulley. Such devices are inefficient, because generally the friction is not sufficient to carry along the finger and with it the belt, particularly when there is considerable working resistance on the shaft. It then happens that the pulley slides beneath the finger without throwing the belt onto the pulley, because the contact-surface of the finger is too small or because the finger does not bear with its whole surface. I obviate this difficulty by substituting for the finger a broad sheet or flap, the whole face of which comes to a bearing, and which, owing to the nature of the material used, causes considerable friction. The materials most suitable for this purpose are sheets of india-rubber with textile material laid in between or leather coated by rubber or other flexible material with great adhesive power.

My invention will be best understood by reference to the annexed figures, which show one form of the device, where the guide-flap is pivoted to the holder.

In the drawings, Figure 1 is a side view of the device. Fig. 2 is a front view, partly in section. Fig. 3 is a transverse section, on a larger scale, of the guide-flap. Fig. 4 is a plan view of the guide-flap. Figs. 5, 6, and 7 are perspective views, on a smaller scale, illustrating the application of the device.

The figures show a holder consisting of a handle *a*, to which a bent arm *b* is secured in any suitable manner. *c* is a guide-piece consisting of a flat metal core with a pin *e*, by which it is pivoted to the outer end of the arm *d* of the holder, and of an elastic flap inclosing the core *d*. The elastic flap may be made

of sheets of any suitable flexible material possessing great adhesive power with or without interposed textile material or of a flexible material coated with another flexible material possessing great adhesive power. In the example shown the elastic flap is formed of several layers of india-rubber, between which layers *ff* of strong textile material are placed. The object of the textile material is to take up the heavy pull caused by putting on the belt, and thus to give greater durability to the flap. To prevent slipping of the belt from the guide-piece, a finger *g* is provided, which projects at right angles to the flap and is held in this position.

When a belt is to be put upon the running pulley, the guide-piece *c* is placed between the pulley and the part of the belt to be put upon the pulley, the belt pushed to the periphery of the pulley, and the guide-piece pressed against the face of the pulley, Fig. 5. Through the pull of the belt the broad surfaces of the rubber flaps projecting beyond the metal core are caused to bear upon the face of the pulley and adhere strongly to the latter, as well as to the belt, causing the belt to be carried along, Figs. 6 and 7. The form of the device and in particular of the handle and arm may be changed to adapt the device to different conditions of use, the essential part of the invention being the use of a flexible guide-piece.

What I claim as new is—

1. In a device for running belts onto pulleys, a holder, and a guide-piece connected to the holder, said guide-piece consisting of a metal core inserted into broad sheets or flaps of flexible material, substantially as described.

2. In a device for running belts onto pulleys, a holder, and a guide-piece, the latter consisting of a metal core inserted into rubber flaps and pivoted to the holder, substantially as and for the purpose specified.

3. In a device for running belts onto pulleys, a holder and a guide-piece, the latter consisting of a flat metal core pivoted to the holder, and of sheets of flexible material possessing great adhesive power, with interposed textile material, inclosing the core, substantially as and for the purpose specified.

4. In a device for running belts onto pulleys, a holder, a guide-piece consisting of a flat metal core pivoted to the holder, and sheets of rubber with interposed textile material inclosing the core, substantially as and
5 for the purpose specified.

In testimony whereof I have hereunto set

my hand in the presence of two subscribing witnesses.

CASPAR KOCH.

Witnesses:

WILLIAM ESSENWEIN,
GEO. P. PETTIT.