

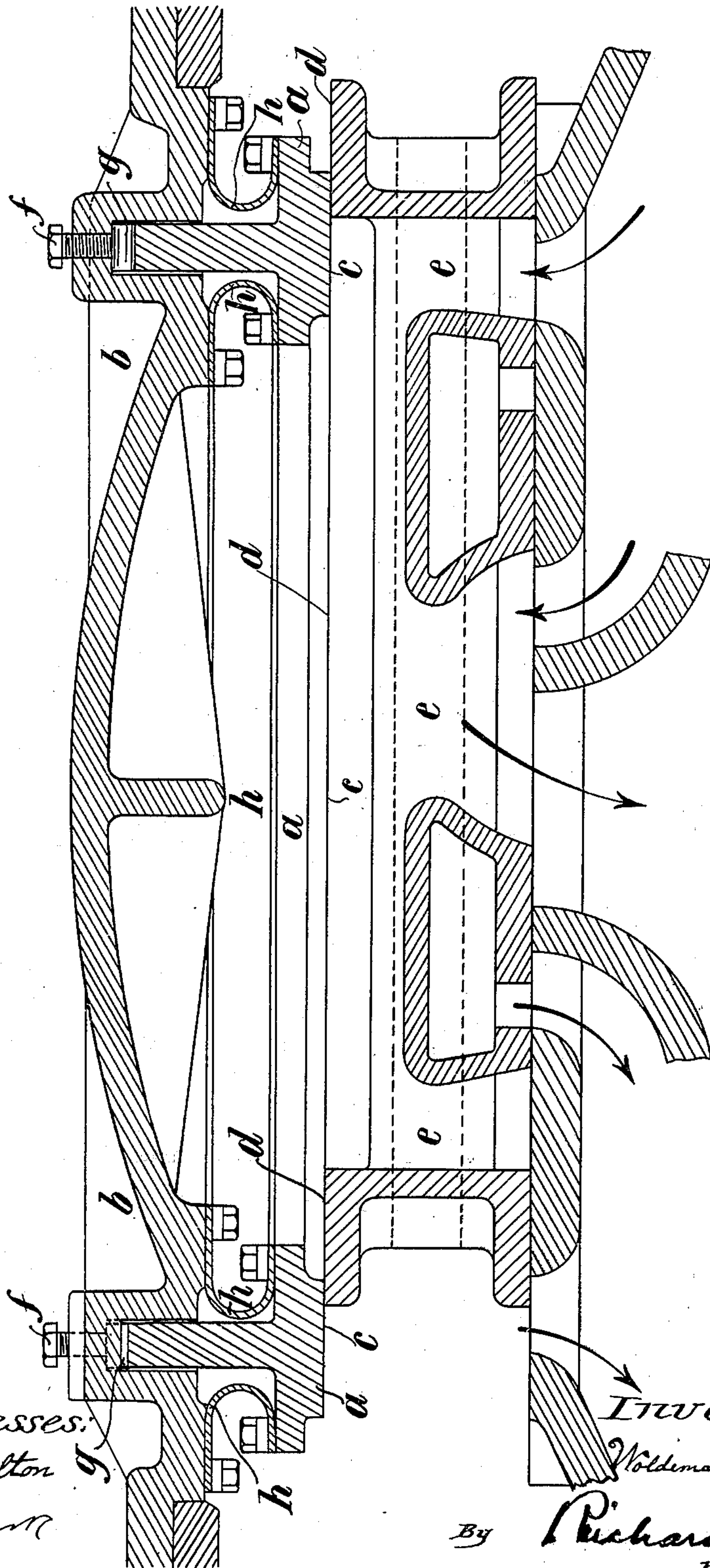
No. 662,599.

Patented Nov. 27, 1900.

W. KRUNTSCHAK.
BALANCED SLIDE VALVE.

(Application filed Mar. 7, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

WOLDEMAR KRUNTSCHAK, OF ST. PETERSBURG, RUSSIA.

BALANCED SLIDE-VALVE.

SPECIFICATION forming part of Letters Patent No. 662,599, dated November 27, 1900.

Application filed March 7, 1900. Serial No. 7,625. (No model.)

To all whom it may concern:

Be it known that I, WOLDEMAR KRUNTSCHAK, a subject of the Emperor of Russia, and a resident of St. Petersburg, Russia, have invented certain new and useful Improvements in Balanced Slide-Valves, of which the following is a specification.

In apparatus for relieving the pressure at the back of slide-valves of steam-engines in which for the purpose of making a tight joint between the back of the slide-valve and the steam-chest cover a tightening flange or plate is used the objection is found that if the parallel surfaces between which the front and back faces of the valve-slide are unyielding jamming or leakage are liable to take place. This happens even if the greatest care is taken in screwing on the steam-chest cover.

The object of the present invention is to entirely avoid this difficulty.

The drawing shows a sectional elevation of the invention on a Penn's slide-valve. For this purpose the rib or flange *a*, which is pressed against the back of the valve and serves to prevent leakage between the latter and the steam-chest cover *b*, is provided with a vertical flange projecting up, which is so guided in a recess in the cover *b*, in which it fits freely, that its sliding surface *c* can always closely adapt itself to the back *d* of the slide-valve *e*. For this purpose the projecting flange described is pressed outward from the recess in which it fits by means of adjustable springs *g*, regulated by screws *f*, screwed through the bottom of the recess from the outside. To allow the parallel movement in and out of the

projecting flange *a* in the recess in the cover *b*, a corresponding flexible, but yet always absolutely tight, connection between them is required. For this purpose it is preferred to use thin flexible elastic metal strips *h*, surrounding the entire flange *a*, the strips *h* being curved round (U shape in cross-section) and one edge being screwed to the upper side of the rib or flange *a*, which presses up the back *d* of the valve *e* and against which the back of the latter works, and the other edge being screwed to the top of the steam-chest cover *b* inside.

Flexible strips *h* of the kind described are fitted and fixed at both sides of the upward-projecting flange *a* upon both the inner and outer edges of the flange against which the valve works. Suitable spaces may be left on the lower side of the flange which presses on the back of the valve.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a slide-valve the combination with a rib or flange provided with a vertical flange arranged between the back of the slide-valve and the steam-chest cover, a recess in the latter, in which the vertical flange fits freely and U-shaped metal strips arranged inside and outside between the steam-chest cover and the flange.

In witness whereof I have hereunto set my hand in presence of two witnesses.

WOLDEMAR KRUNTSCHAK.

Witnesses:

M. BREITFUSS,
E. LOURIE.