

A. VON RÜGEN.
 FOUNDATION FOR FRAMES OF EVERY DESCRIPTION, &c.
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977,330.

Patented Nov. 29, 1910.

Fig. 1.

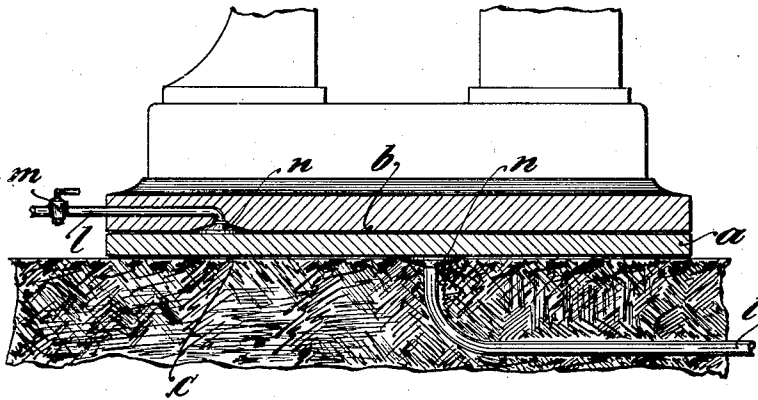
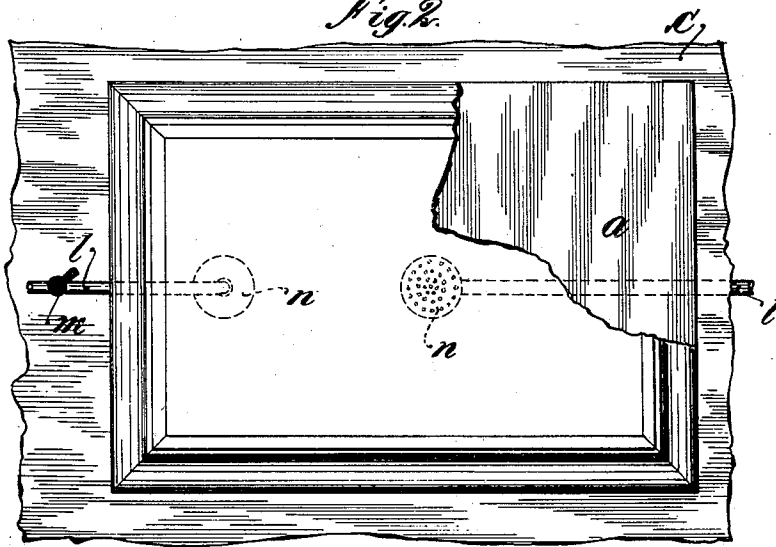


Fig. 2.



Witnesses:

1. *Paul Rügen*
 2. *Erwin Meier*

Inventor:

Adolph von Rügen

UNITED STATES PATENT OFFICE.

ADOLPH VON RÜGEN, OF MOSCOW, RUSSIA.

FOUNDATION FOR FRAMES OF EVERY DESCRIPTION, &c.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ADOLPH VON RÜGEN, a subject of the Emperor of Germany, residing at Moscow, Russia, have invented certain new and useful Improvements in Foundations for Frames, of which the following is a specification.

This invention relates to an improvement in the substructure of frames of every description. The innovation is especially intended for the frames of working-machines, for instance, machine-tools, spinning and weaving machines, and so on, as well as for frames of smaller power-engines. The innovation consists therein that the frame is without any masonry, cementing or the use of fastening devices, ties, supports, clamps or others, immediately placed upon a layer of india-rubber, gutta-percha or a mass possessing similar properties.

The drawing illustrates a sample form of construction of the invention.

Figure 1, is a side view, partly in section. Fig. 2, is a top view.

Between the machine frame *b*, and the floor *c*, is arranged a layer of india-rubber *a*. After the floor has been planed the machine is placed on the layer of india-rubber and produces by its weight a vacuum, whereby the india-rubber plate is, by suction, caused to firmly adhere to the floor and foundation. In this way the machine is firmly held in its position, and practical tests have shown that even if the machines are driven by transmissions, they are not moved from the place. The thickness of the india-rubber plate depends, of course, on the circumference and weight of the machine. If the weight of the machine is not great enough to produce a sufficient vacuum, the vacuum may also be produced by a pump, which is by a pipe conduit put into communication with the india-rubber plate. To this end there is arranged at any suitable place of the foundation the pipe conduit *l*, (Fig. 2) either from the floor, or laterally from the foundation, or from the foundation from above, and put into communication with a vacuum pump.

A cock *m*, serves to shut off the conduit *l*, after the vacuum has been produced. In this way a large number of machines may be connected with one vacuum pump by a suitable net of pipes. In the case of large machine-halls the pipe conduit *l*, may be embedded in the floor (Fig. 1) and pass out to the outside at the different places where machines are to be put up, through perforated disks *n*, for instance. When mounting it is then only necessary to put the india-rubber pieces or disks in place and after placing the machine on the india-rubber, if the weight of the machine is not sufficient to produce vacuum, to set the vacuum pump going, until the vacuum is produced and the machine is immovable. Thereupon the cock *m*, is closed. If the vacuum decreases, it can be renewed by opening the cock and starting the pump.

I claim:

1. A foundation having a plane surface, a weighted member having a plane surface, an interposed elastic base member having both of its sides plane surfaced adapted to contact with the plane surface of the foundation and the plane surface of the weighted member, and be compressed by said weighted member, whereby the air is expelled from between said surfaces and adherence of the several members induced.

2. A plane surfaced foundation, a plane surfaced weighted frame member, and an interposed elastic base member both sides of which are plane surfaced.

3. A plane surfaced foundation, a vacuum pipe embedded in said foundation, a plane surfaced weighted member, a vacuum conduit in said member, and an interposed resilient base member both sides of which are plane surfaced.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ADOLPH VON RÜGEN.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.