E. J. JOLIVET.

VIBRATION NEUTRALIZER.

APPLICATION FILED OCT. 11, 1907.

919,876. **Patented Apr. 27, 1909.**

Fig. 1.

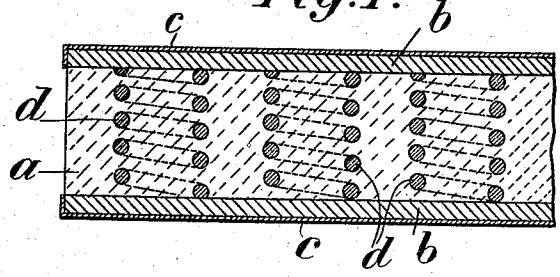
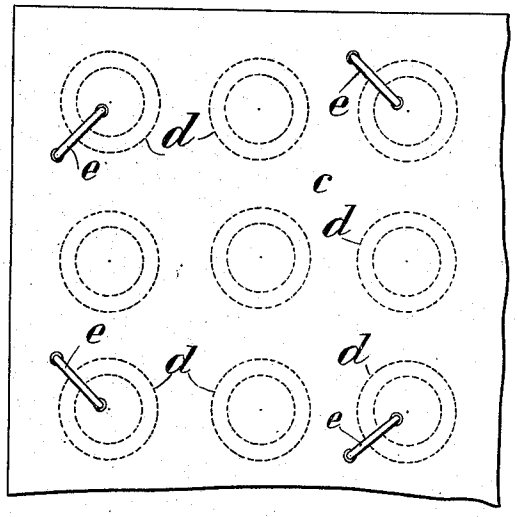


Fig. 2.



Witnesses:
C. Heymann
E. B. Singer.

Inventor:
Eléonor Joseph Jolivet
by B. Singer Attorney.

UNITED STATES PATENT OFFICE.

ELÉONOR JOSEPH JOLIVET, OF PARIS, FRANCE.

VIBRATION-NEUTRALIZER.

No. 919,876. Specification of Letters Patent. Patented April 27, 1909.

Application filed October 11, 1907. Serial No. 396,987.

To all whom it may concern:

Be it known that I, ELÉONOR JOSEPH JOLIVET, a citizen of the French Republic, and resident of Paris, France, have invented certain new and useful Improvements in Vibration-Neutralizers, of which the following is a specification.

This invention has for its object a kind of elastic plates or bands intended to be interposed between the framework of engines and their solid foundations or arranged beneath these foundations with a view of doing away with the trepidations and vibrations resulting from their motions.

In the annexed drawing, given only by way of demonstration, Figure 1 is a vertical section of a fragment of elastic plates, and Fig. 2 is a top plan view of Fig. 1.

A plate or elastic band constructed according to the present invention comprises a mattress *a* having parallel faces made of felt, hair, cork or other similar product arranged between two plates *b* of agglomerated cork; the whole being arranged between two plates of sheet metal *c*, *c* the edges of which are bent as shown by the Fig. 1 in order to surround the other parts or elements on a part of their height. Inside the mattress *a* are arranged springs *d* the strength and the number of which vary according to the weight to be supported. The felt *a* or similar material is impregnated with a material such as heavy oil or the like according to the applications of the device. Attaching devices *e* made of metallic wire and distributed in a suitable manner upon the surface of the elastic plate connect the plates of sheet metal *c* so as to render solidary all the elements of the elastic plate. The plates of sheet metal simply have as their object to prevent, at the moment of the construction of the massive structure, the liquid elements of the masonry such as mortar, the plaster and the like from flowing into the interior of the mattress *a* which, as will be easily understood, would be injurious for the elasticity of the said material. The thus constituted plate may be arranged under the massive masonry or between two parts of this massive masonry or still between the engine and the said masonry; it may also be arranged in moist places or even in the water. In the latter case the material used for impregnating the felt will preferably be tallow and in all the cases the fatty material protects the springs against oxidation and allows of them being employed during a very long space of time. The shape of these springs may vary. The drawing shows coiled springs but conical spiral springs may equally be employed in case it is desired to obtain a greater suppleness as this kind of springs allows a greater yielding than the coiled springs. These elastic plates may be used in solid masonries of all kind of engines especially of steam hammers, rams, presses, motors of any kind, dynamos and the like; they are adapted to attenuate and even to suppress the trepidations adapted to disturb the neighbors.

Having now fully described my said invention what I claim and desire to secure by Letters Patent is:—

1. In an antivibration plate of the kind described the combination of a plate of elastic material, elastic members inserted into the said plate of elastic material and backing plates for both sides of the said plate and means for connecting all together, substantially as and for the purpose set forth.

2. In an antivibration plate of the kind described, the combination of a plate of elastic material, springs inserted into the said plate of elastic material and extending therein to the surfaces of the plate, backing plates for both sides of the said plate, rigid backing plates for the said backing plates and means for connecting the whole together, substantially as and for the purpose described.

3. In an anti-vibration plate of the kind described the combination of a plate of elastic material, coiled springs inserted into the said plate and extending therein to both the surfaces, backing plates of agglomerated cork for both surfaces of the said plate, rigid backing plates of sheet metal for each of the said backing plates and means for securing the whole together, substantially as and for the purpose set forth.

4. In an anti-vibration plate of the kind described the combination of a plate of elastic material impregnated with a fatty substance, springs inserted into the said plate and extending to both surfaces thereof, backing plates of agglomerated cork for both surfaces of the said plate, rigid backing plates of sheet metal for each of the said

backing plates and means for connecting the whole together, substantially as and for the purpose set forth.

5. In an anti-vibration plate of the kind described the combination of a plate of elastic material impregnated with heavy oil, springs inserted into the said plate and extending to both surfaces thereof, backing plates of agglomerated cork for both surfaces of said plate, rigid backing plates of sheet metal for each of said backing plates and means for connecting the whole together, substantially as and for the purpose set forth.

6. In an anti-vibration plate of the kind described the combination of a plate of elastic material impregnated with a water repelling substance, springs inserted into the said plate and extending therein to both surfaces thereof, backing plates of agglomerated cork for both surfaces of said plate, rigid backing plates of sheet metal for each of said backing plates and means for securing the whole together, substantially as and for the purpose set forth.

7. In an anti-vibration plate of the kind described the combination of a plate of elastic material such as felt impregnated with a fatty substance, of springs inserted into the said plate and extending to both surfaces thereof, a backing plate of agglomerated cork for both surfaces of said plate, a rigid backing plate of sheet metal applied to each of said backing plates and having bent borders and attaching devices made of metallic wire and adapted to secure the whole together, substantially as and for the purpose described.

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

ELÉONOR JOSEPH JOLIVET.

Witnesses:

ADOLPH STURM,

HANSON C. COXE.