H. BARBER.

DRAFT DEVICE.

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928,168.

Patented July 13, 1909.

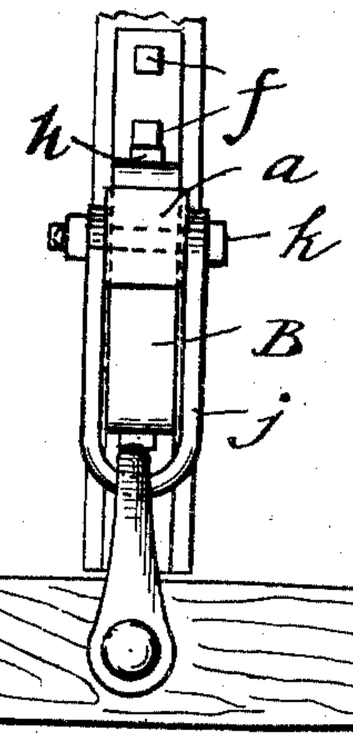


Fig. 1.

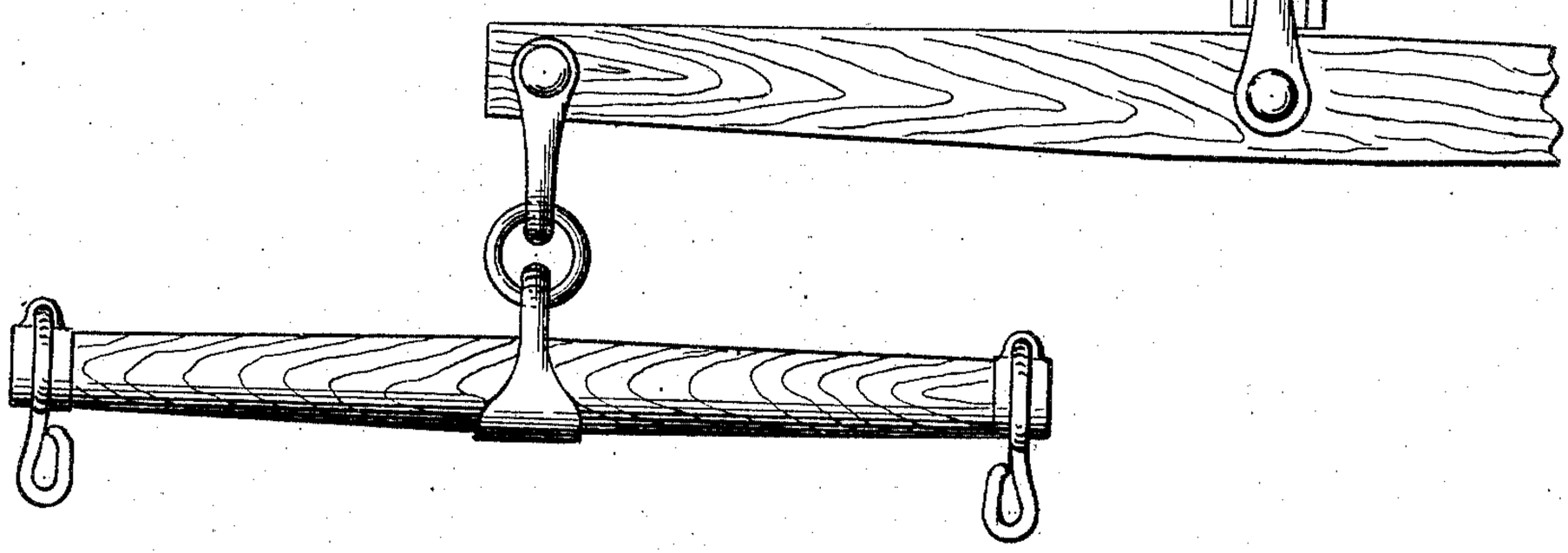
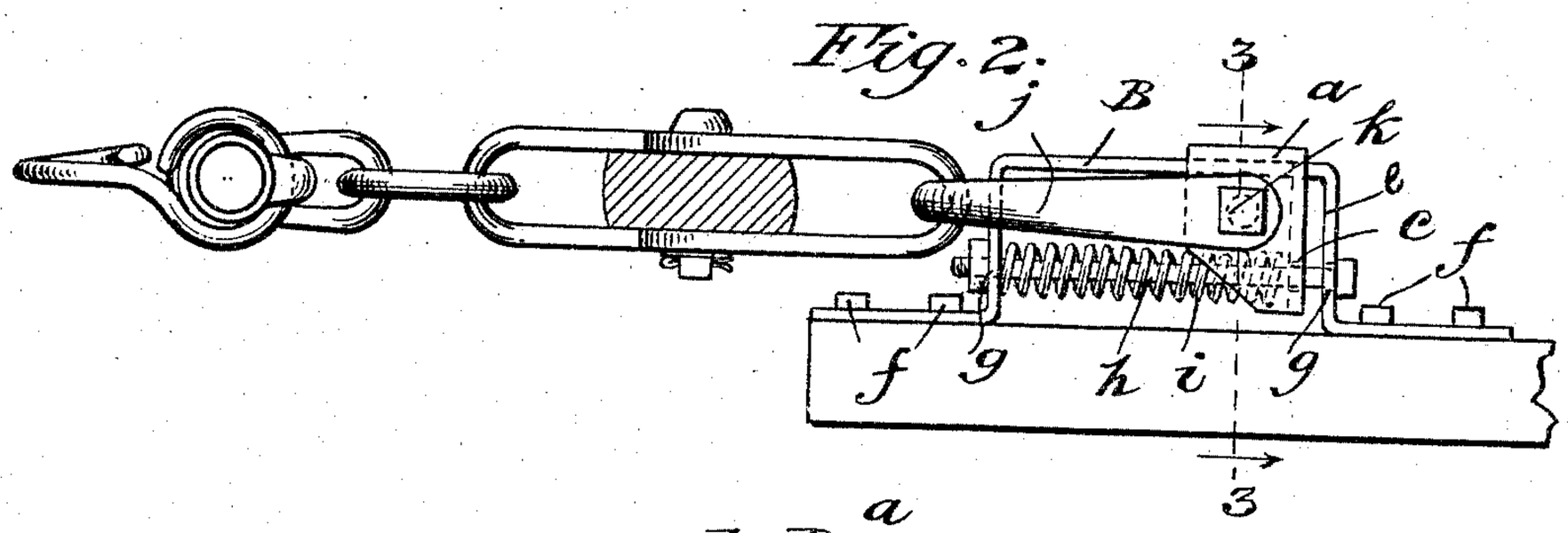


Fig. 2.



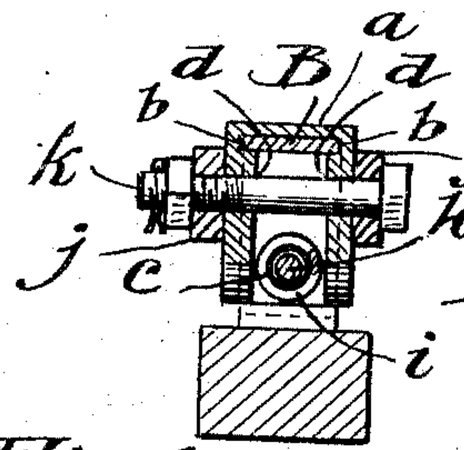
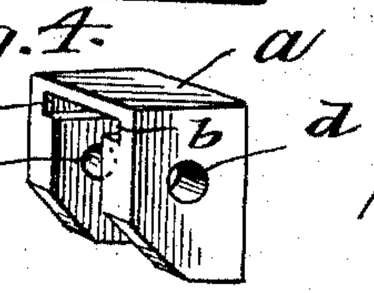


Fig. 3.

Fig. 4.



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DRAFT DEVICE.

No. 928,168. Specification of Letters Patent. Patented July 13, 1909.

Application filed December 14, 1907. Serial No. 406,513.

To all whom it may concern:

Be it known that I, HIRAM BARBER, a citizen of the United States, residing at Chicago, county of Cook, State of Illinois, have invented a new and useful Draft Device, of which the following is a specification.

My invention relates to improvements in draft-devices in which a draw hood mounted upon a double bearing engages with a spring and reciprocates with the resiliency of the spring, the object being to provide a positive resilient path for the power and resistance exerted upon the spring which is designed to absorb the vibrations of such resistance. I attain these objects by means of the device shown in the accompanying drawing, in which:

Figure 1 is a plan view with evener attached. Fig. 2 is a side view of same. Fig. 3 is a cross-section of my device on line 3—3 of Fig. 2. Fig. 4 is a perspective of the hood.

In detail, *a* is the hood (Fig. 4) which is provided with longitudinal recesses *b*, *b*, in the inner walls and passing through the rear wall; *c* a longitudinal perforation in the rear wall; and *d*, *d*, are lateral registering perforations through the side walls.

e, is a strap which is adapted to be attached to the tongue of a wagon or to a harrow or other implement by means of lag screws *f*, *f*, or bolts and is provided with longitudinal registering perforations *g*, *g*.

h, is a machine bolt inserted from the rear through the perforations *g*, *c*, and *g*.

i, is a spiral spring of suitable strength and resiliency strung loosely upon the bolt *h*.

j is a draw-clevis loosely attached to the hood by means of the bolt *k* which passes through the perforations *d*, *d*.

In assembling these parts the strap *e* is first shaped to the proper angles at one end; the hood *a* is then mounted by inserting the other end of the strap into the recesses *b*, *b*; after which the latter end of the strap is shaped to the proper angles. The spring is next held in place longitudinally between the inner side of the hood and the forward upright of the strap so as to register with the perforations *c*, *g*, *g*, when the bolt *h* may be inserted from the rear. The draw-clevis is attached in the manner shown. In proportioning the size of strap to the recesses *b*, *b*, and of the bolt to the perforation *c*, it is essential that the fit be sufficiently snug to avoid binding friction.

It will be observed that the power being exerted at the point of the perforations *d*, *d* which are at a tangent from the axis of resistance which is exerted upon the spring *i*, the tendency to binding friction is neutralized by the extensive longitudinal surface presented by the contact of the strap and hood. However, it is not indispensable that the contact of strap and hood have any particular lateral extension; nor that it be flat; nor that the hood be provided with the recesses *b*, *b*, these being an incident of construction in the present form; but such contact must present sufficient longitudinal bearing surface as to neutralize the binding effect of the tangent pull on the spring.

What I claim is:

1. In draft-devices the combination with a strap, rod and spring in the form and arrangement as shown of a draw-hood which is provided with two bearings one of which bearings primarily carries the resistance of the load and in which draw-hood the draft-power is exerted at a point between said bearings, the other of said bearings being a slide which is adapted to preserve the tangent pull of said draft-power upon said resistance-bearing, substantially as described.

2. In draft-devices, the combination with a resistance-bearing which consists of a rod engaging with a draw-hood which reciprocates on said rod in contact with a spring of a slide-bearing formed of a surface of said hood contacting with a strap as shown and adapted to preserve the tangent pull on said resistance-bearing and means for exerting said pull at a point in said hood between said bearings, substantially as described.

3. The combination with a hood which is provided with a recessed bearing-aperture, a longitudinal bearing perforation through the rear wall and transverse registering ports through the side walls between said bearings, of a strap passing through said recessed aperture a rod passing through said perforation and engaging with said strap and a spiral spring strung upon said rod, substantially as described.

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Witnesses:
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