

(No Model.)

F. H. WILSON.
HEADLIGHT FOR STEAM THRASHERS.

No. 473,991.

Patented May 3, 1892.

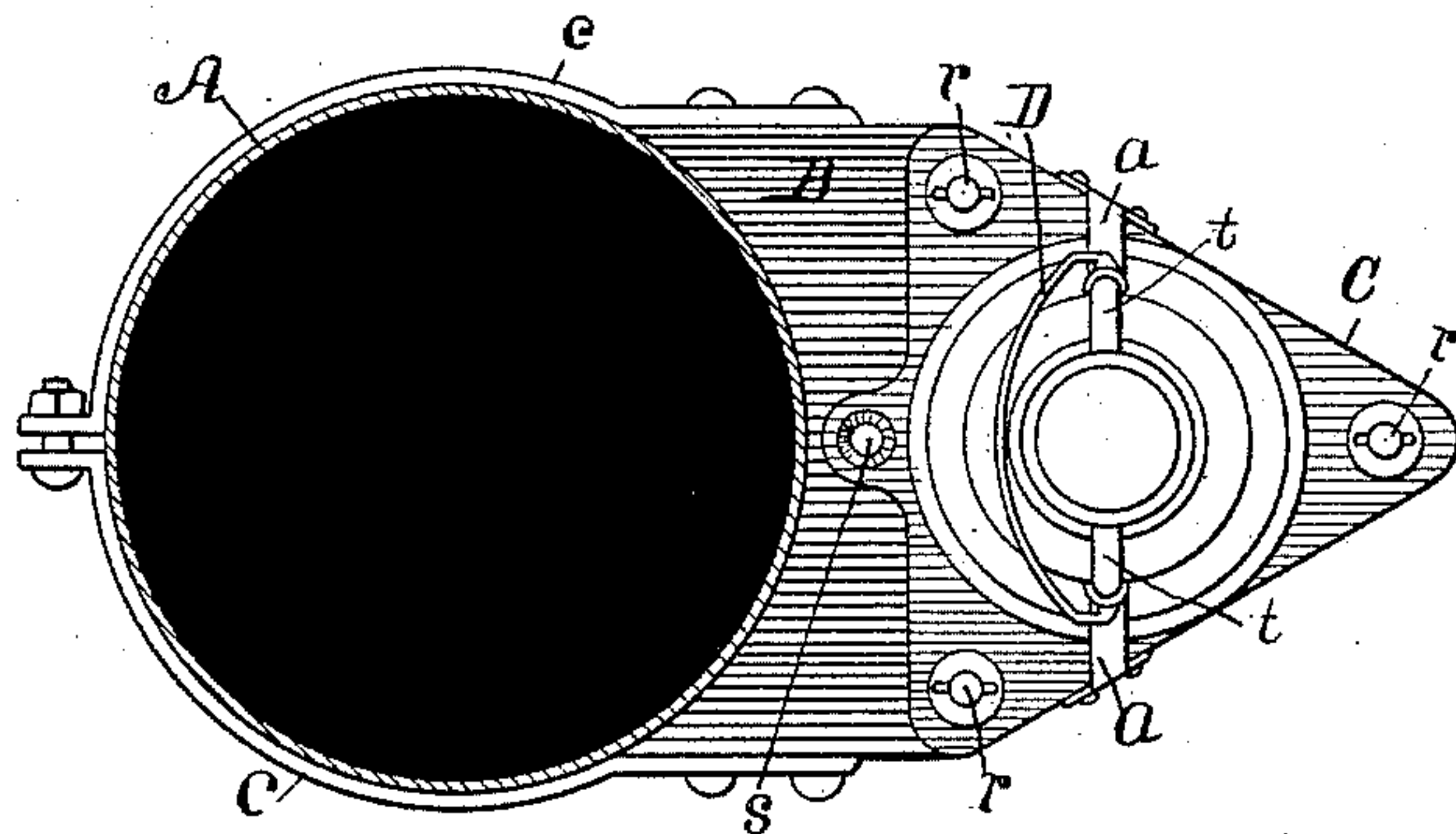


Fig. 1

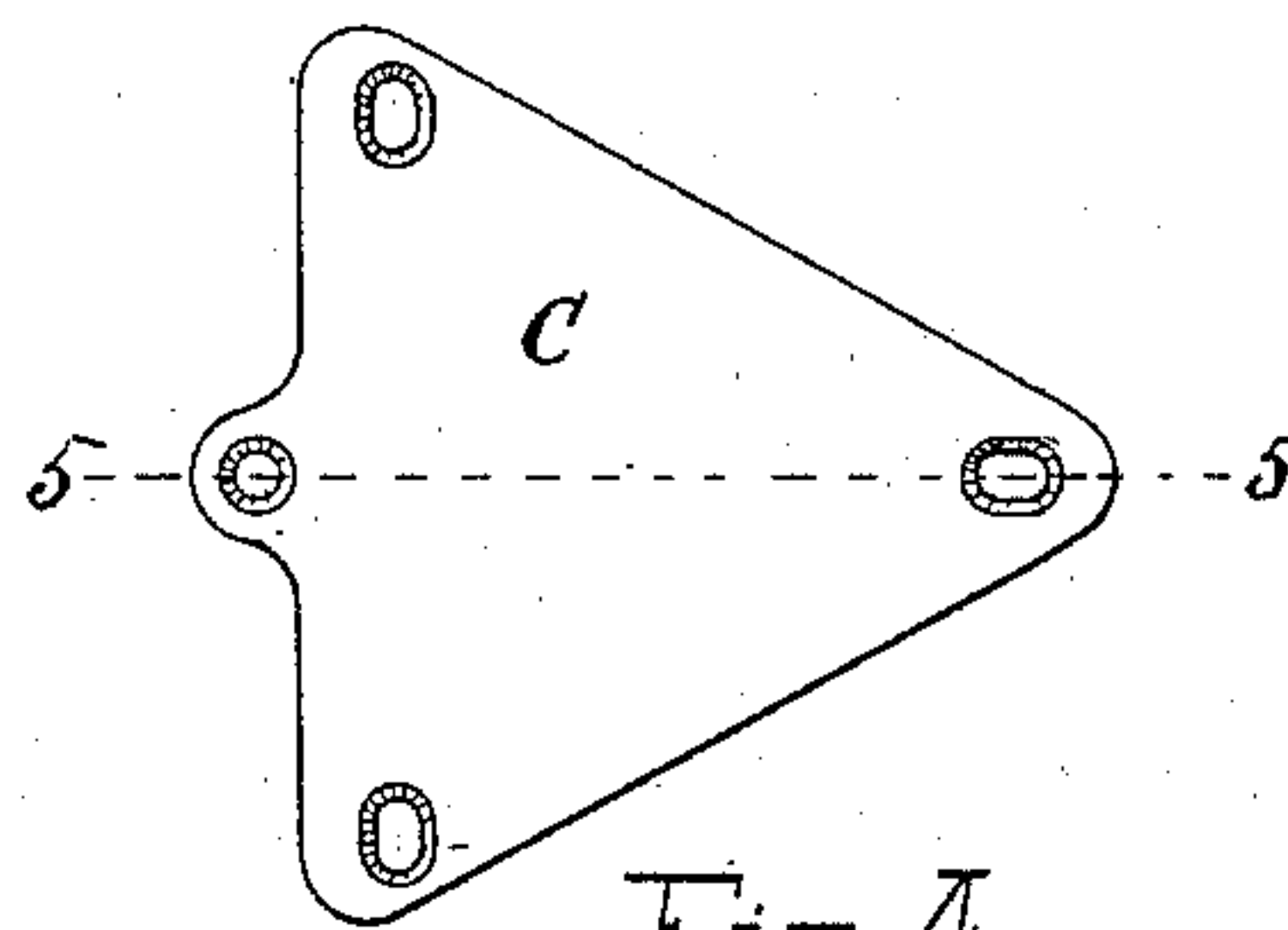


Fig. 4

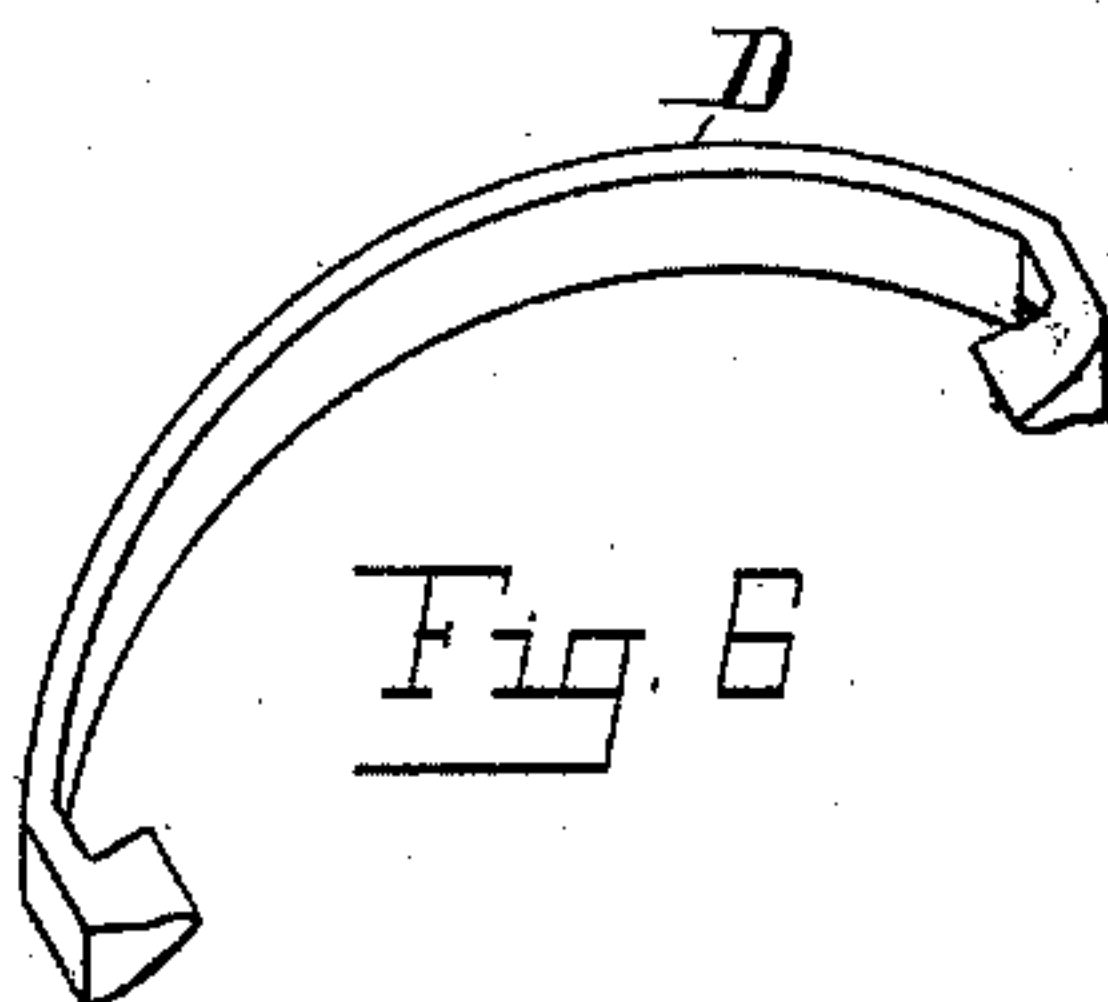


Fig. 6



Fig. 5



Fig. 7

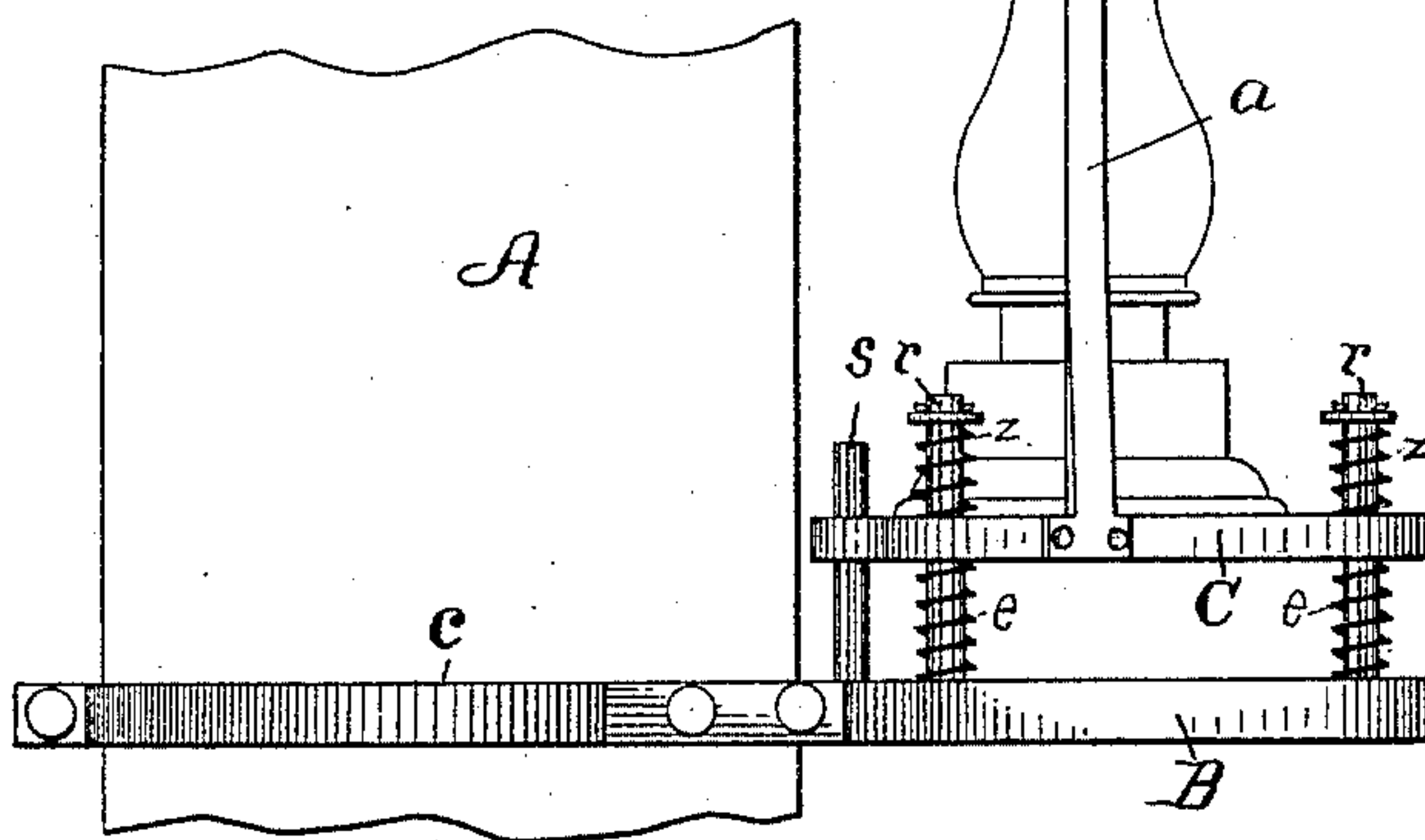


Fig. 2

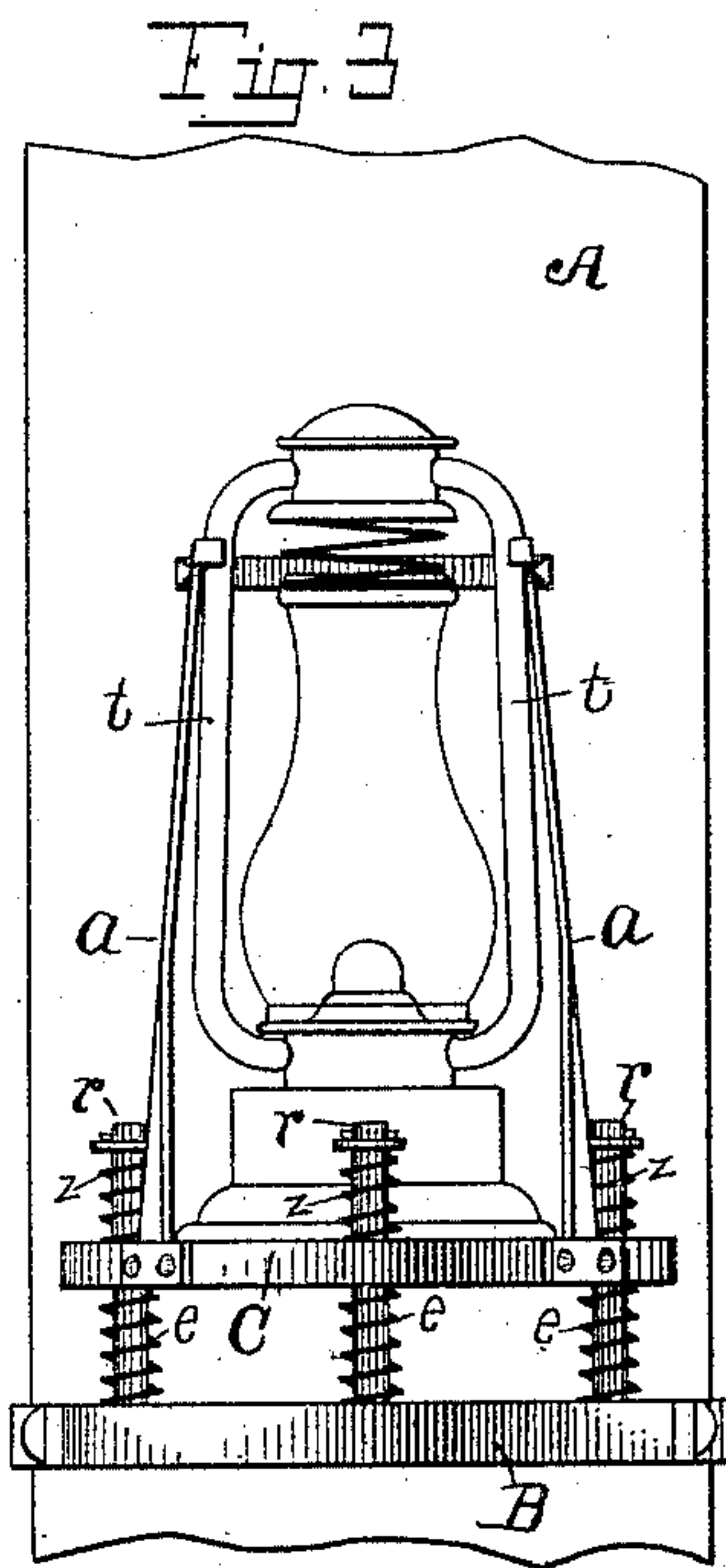


Fig. 3

Witnesses:

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UNITED STATES PATENT OFFICE.

FRANK H. WILSON, OF COOPER, MICHIGAN.

HEAD-LIGHT FOR STEAM-THRASHERS.

SPECIFICATION forming part of Letters Patent No. 473,991, dated May 3, 1892.

Application filed December 10, 1891. Serial No. 414,559. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. WILSON, a citizen of the United States, residing at Cooper, county of Kalamazoo, State of Michigan, have invented a new and useful Head-Light for Steam-Thrashers, of which the following is a specification.

This invention has for its object to so construct a support or holder for a lantern or other light to be used as a head-light for the engines of steam thrashing-machines that the jars and shocks produced by the unevenness of the highways will not displace or break the lantern or extinguish the flame nor interfere with its proper burning, all as more particularly described and claimed below.

In the drawings forming a part of this specification, Figure 1 is a plan view of Fig. 2 with part in section; Fig. 2, a side elevation; Fig. 3, an end elevation looking against Fig. 2 from a point at the right; Fig. 4, a plan view of a lettered detail in Figs. 1, 2, and 3; Fig. 5, a sectional elevation on line 5 5 in Fig. 4, and Figs. 6 and 7 enlarged lettered details, in perspective hereinafter described.

Referring to the lettered parts of the drawings, A represents the smoke-stack of an engine employed in steam thrashing-machines, or it might represent the smoke-stack of any traction-engine which was transported from one point to another over the highway. No engine is here shown. It has been customary to attach an ordinary lantern in front of these engines as a head-light during the night, the night being the usual time when the steam-thrashers are moved from one farm to another.

My invention particularly refers to means for supporting and holding said lantern so as to prevent its being broken or extinguished, as before stated.

At B is shown a supporting-bracket fitting against the smoke-stack A and held in place by confining-straps *c c* on each side, which straps are bolted together on the side of the smoke-stack opposite to the bracket. Projecting upright from the bracket B are three posts *r r r*. The bracket, as here shown, is made to fit against the front side of the smoke-stack, and from thence the sides converge toward the front. Since this is a mere matter of choice, as many of these posts *r* may be em-

ployed as may be deemed advisable, three being sufficient for a bracket of this form. Upon these posts *r* are spiral springs *e e*, and over these posts *r* and upon the springs *e* is placed a plate C. The holes through the plate C through which the posts *r* pass are elongated and are made flaring at their openings both above and below said plate C, as in Figs. 4 and 5. Upon the same posts *r* are placed spiral springs *z*, which springs rest upon the plate C, and through the top ends of said posts *r* is inserted a key to keep said upper springs *z* in place. The lantern is placed upon the plate C, as shown in Figs. 2 and 3, said lantern being held in place by upright elastic bars *a a*, one on each side, which clamp against the frame *t* of the lantern, the upper ends of said elastic bars being curved to fit against the frame of the lantern, as shown in Figs. 1 and 7. The lower ends of these elastic bars are secured to the plate C. The upper ends of said elastic bars *a* are provided with a series of notches *v* on the outside, into which are inserted the ends of the yoke D, which yoke surrounds one-half of the upper end of the lantern, Figs. 1, 2, and 6. The object of this is that by moving this yoke up or down and engaging its ends into different notches the clamping-pressure of the elastic bars *a* may be adjusted according to the size of the lantern and the pressure required to hold it in place. In some instances this yoke D might be dispensed with. By means of this construction it will be seen that the plate C, which supports the lantern, is cushioned by springs *z* and *e* above and below it, the flaring elongated holes through which the posts *r* pass allowing said plate C to tilt and shake when the engine jars or sways from one side to the other owing to the uneven surface of the roads.

While in most instances it may not be necessary, I have here shown a post *s* projecting upward from the bracket B and through a hole of the plate C at the rear side as a sort of a guide or fulcrum to the plate C, the openings of said hole also being flared, as are the holes of the posts *r*. It is designed that by thus cushioning the plate C by the use of these springs above and below that said plate will be carried comparatively level while the engine is being jostled by the unevenness of

the road, or at least if said plate is not carried level the shock will be so cushioned as not to materially affect the signal-light.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A head-light support for the engines of steam-thrashers and the like, comprising a bracket and a spring supported and cushioned plate upon said bracket and upon which the light is supported, said plate being provided with upwardly-extending elastic bars for keeping the light in place, substantially as set forth.

2. A head-light for the engines of steam-thrashers and the like, comprising a bracket and a spring supported and cushioned plate upon said bracket upon which the light is supported, said plate being provided with upwardly-projecting elastic bars for keeping the light in place, the upper end of said elastic bars being provided with a series of notches, and a yoke, the ends of the same being adapted to adjustably engage said notches for controlling the clamping-pressure of said elastic bars against the light or lantern, substantially as set forth.

3. A head-light support for the engines of steam-thrashers and the like, consisting of a bracket provided with bars for encircling a smoke-stack in attaching said bracket thereto, posts extending upward from said bracket, a plate loosely mounted upon said posts and adapted for supporting and holding the light or lantern, and cushioning-springs on the posts above and below said plate, substantially as set forth.

4. A head-light support for the engines of steam-thrashers and the like, consisting of a bracket provided with bars for encircling a smoke-stack and for attaching said bracket thereto, posts extending upward from said bracket, a plate loosely mounted upon said posts and adapted for supporting and holding the light or lantern, and cushioning-springs on the posts above and below said plate, and a rear fulcrum-post extending upward from

the bracket and loosely passing through the cushioned plate, substantially as set forth.

5. The combination, with the smoke-stack of a traction-engine, of a bracket adapted to be attached to said smoke-stack, posts extending upward from said bracket, a plate loosely mounted upon said posts, cushioning-springs above and below said plate, a lantern supported by said plate, and upwardly-extending elastic bars attached to said plate and adapted to clamp against the frame of the lantern for holding it in place, substantially as set forth.

6. The combination, with the smoke-stack of a traction-engine, of a bracket adapted to be attached to said smoke-stack, posts extending upward from said bracket, a plate loosely mounted upon said posts, cushioning-springs above and below said plate, a lantern supported by said plate, and upwardly-extending elastic bars attached to said plate and adapted to clamp against the frame of the lantern for holding it in place, the upper ends of said elastic bars being provided with a series of notches, and a yoke, the ends of which are adapted to adjustably engage said notches, substantially as set forth.

7. A lantern-support for head-light purposes stated, said support comprising a supporting-bracket, posts extending upward from said bracket, a plate having a series of holes corresponding to the number of posts, which holes fit loosely over said posts, the openings of said holes above and below the plate being flared outward, springs on said posts above and below the plate, and elastic bars extending upward from said plate and adapted to clamp against the frame of the lantern, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in the presence of two witnesses.

FRANK H. WILSON.

Witnesses:

MARIAN LONGYEAR,
JOHN McLARTY.