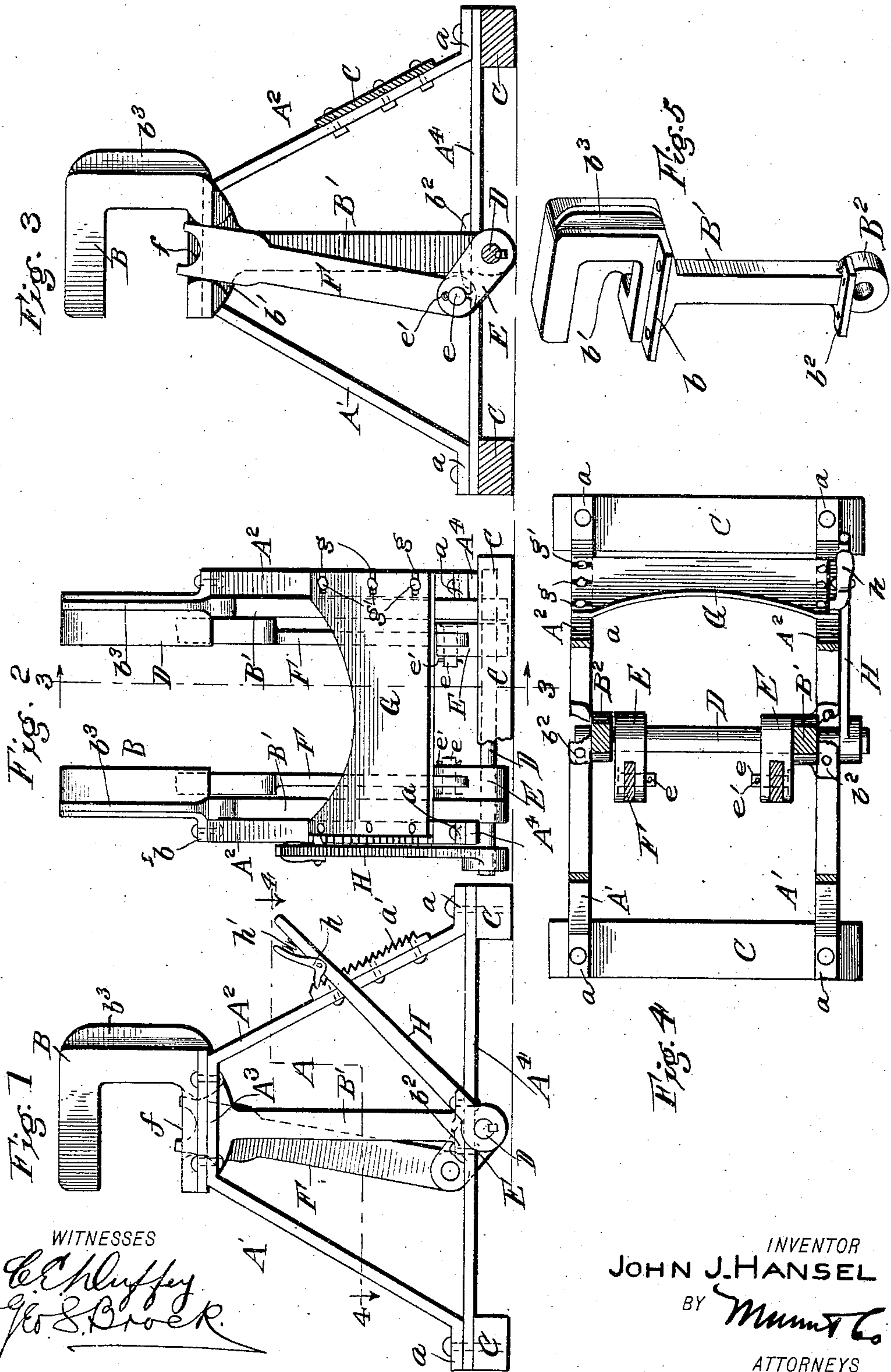


No. 855,307.

PATENTED MAY 28, 1907.

J. J. HANSEL.
STAND FOR MOTOR CYCLES, &c.
APPLICATION FILED MAY 24, 1906.



UNITED STATES PATENT OFFICE.

JOHN J. HANSEL, OF MUSKEGON, MICHIGAN.

STAND FOR MOTOR-CYCLES, &c.

No. 855,307.

Specification of Letters Patent.

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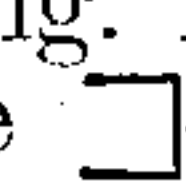
To all whom it may concern:

Be it known that I, JOHN J. HANSEL, a citizen of the United States, and a resident of Muskegon, in the county of Muskegon and State of Michigan, have made certain new and useful Improvements in Stands for Motor-Cycles, &c., of which the following is a specification.

My invention relates to improvements in stands for motor cycles, and has for its object to provide simple, cheap and efficient means for supporting a motor cycle while being repaired, cleaned, etc.

My invention consists in certain novel features of construction, arrangement and combination of parts, as will be hereinafter fully described and pointed out in the claims, reference being had to the accompanying drawing, in which

Figure 1 is a side elevation of my improvement. Fig. 2 is a rear elevation of the same. Fig. 3 is a vertical section on line 3—3 of Fig. 2. Fig. 4 is a horizontal section on line 4—4 of Fig. 1. Fig. 5 is a perspective view of one of the axle supporting members detached from the frame work of the device.

In carrying out my invention, I construct my stand of two side frames A, consisting of the front bars A', the rear bars A², the top bar A³, the bottom bar A⁴, the front, rear and top bars being made in a single piece. These bars form a truncated pyramid, as shown in Fig. 1, and upon the top bars are secured the -shaped casting B which receives the rear axle of a motor cycle when backed into the same. The side frames of the stand are connected by the front and rear sills C which are bolted to the bottom bars A⁴ and feet a at the lower ends of the front and rear bars A' and A². The casting is as shown open at its front and closed at its rear, and has at its base the horizontal flange b which is bolted to the top bar A³. The casting B has also the integral downwardly projecting bar B', terminating at its lower end in the eye B² in which is journaled the horizontal shaft D, to which is keyed the bifurcated link E, the bifurcated end of which is secured by a bolt e and cotter pin e' to the lifting rod F which extends up through the cut out portion b' of the casting B. The upper end of the lifting rod F has the curved cut out space f which is to engage the ends of the axle of the motor cycle, as will be more fully set forth hereinafter.

To one of the side arms A² is rigidly secured a plate G, having a curved upper edge, while the other end of said plate G is provided with elongated slots g by means of which and the bolts g' said plate is adjustably secured to the other side arm A², so that the lateral space between the said side arms may be varied by removing the bolts that secure the feet a to the cross sills C. On one end of shaft D is keyed the lever H, the free end of which has pivoted to it a pawl h controlled by a coil spring h' which throws normally the end of said pawl into engagement with a rack a' secured to the adjacent side bar A² as shown in Fig. 1. The bars B' have projecting from one side the flanges b² which are bolted to the horizontal bars A⁴, thus forming a central brace for the frame A, as plainly shown in Fig. 1. The casting B may be provided with the ribs b³ to give additional strength to the same.

The manner of using my improvement is as follows. The rear axle of motor cycle is backed into the opening of the casting B and the lever H swung rearwardly and downwardly, thereby forcing the upper end of the lifting rod F upwardly against the steps of the cycle, thus raising the rear wheel of same off the floor, whereby allowing the pawl h to engage the rack a'. The motor cycle will be held off the floor, whereupon it may be tested, repaired, etc. It will be observed that the rear end of the motor cycle can be lifted as high as may be necessary for the purpose desired, and held there.

From the above, it will be observed that a motor cycle can be conveniently and quickly tested, repaired, etc., and that my improvement can be adjusted laterally to suit varying sizes of machines. Also, that the device is simple, cheap and efficient, and is one that can readily be taken apart and packed for shipment or future use.

If desired, the casting B, brace rod B', top bars A³, front and rear bars A' and A², and bottom bar A⁴ may be cast in one piece.

I claim:

1. A stand for motor cycles and the like, consisting of a frame, a casting surmounting the said frame and provided with an opening in its front, a lifting rod adapted to be moved upwardly into said opening, and means for actuating said lifting rod.

2. A stand for motor cycles and the like,

consisting of two side frames spaced apart and connected, heads surmounting said frame, each having an open front, a horizontal shaft mounted in the lower part of said frames, links rigidly secured to said shaft, lifting rods pivotally connected at their lower ends to said links and extending upwardly adjacent to said side frames, and adapted to be moved upwardly into the openings of the heads surmounting the frame, and means for rotating said horizontal shaft.

3. A stand for motor cycles and the like, consisting of two side frames carrying heads comprising top, bottom and rear members, the inner face of the bottom members of said heads having vertical passages, or guideways therethrough, lifting bars fitted to slide vertically at their upper ends through said passages or guideways, a horizontal shaft mounted in the side frames, links rigidly secured to said shaft at one end and at their opposite ends pivotally secured to the lower ends of the lifting rods, a lever rigidly secured to said shaft for turning the same and causing vertical movement of the lifting rods, and means for locking the lever.

4. A stand for motor cycles and the like, consisting of two laterally extensible side frames, heads surmounting said frames, said heads each comprising rigid top, bottom and rear members, said heads adapted to receive the rear axle of a motor cycle or the like.

5. A stand for motor cycles and the like, consisting of two laterally extensible side frames, heads surmounting said side frames and having their fronts open to receive the rear axle of a cycle, lifting rods mounted to

be moved vertically into said openings, and means for actuating said lifting rods.

6. A stand for motor cycles and the like, consisting of two side frames, heads surmounting said frames, said heads having open fronts, a plate laterally adjustably connecting said frames, lifting bars mounted in said frame and adapted to be projected vertically into the openings in the front of the heads, and means for causing vertical movement of said lifting bars.

7. A stand for motor cycles and the like, consisting of two side frames, heads surmounting said frames and comprising top, bottom and rear members, brace rods extending downwardly from said heads centrally of the side frames, said braces having journals in their lower ends, a horizontal shaft mounted in said journals, links rigidly connected at one end to said shaft, lifting rods pivotally connected to the opposite ends of said links and extending upwardly adjacent to the said side frames and adapted to be projected vertically into the opening of the heads, and means connected with the horizontal shaft for rotating the same to cause vertical movement of the lifting bars.

8. A stand for motor cycles and the like, consisting of a frame, a head surmounting said frame, said head comprising a top, bottom and rear members said members being rigid and adapted to receive the rear axle of a motor cycle or the like.

JOHN J. HANSEL.

Witnesses:

O. LE ROY BOANE,
RACHEL A. NICHOLS.