C. K. MELLINGER.

EXTENSION BOW-IRONS FOR CARRIAGE-POLES.

No. 193,263. Patented July 17, 1877.

Fig. 1.

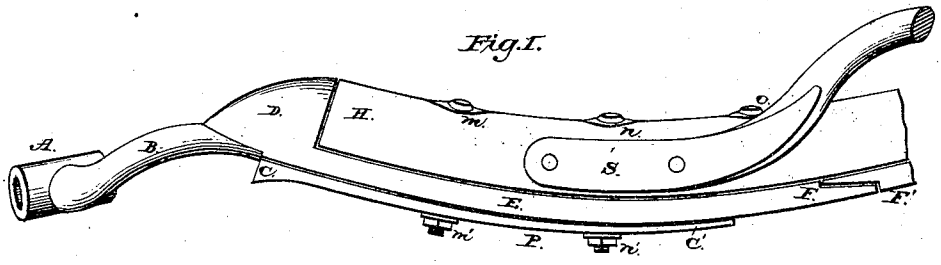


Fig. 2.

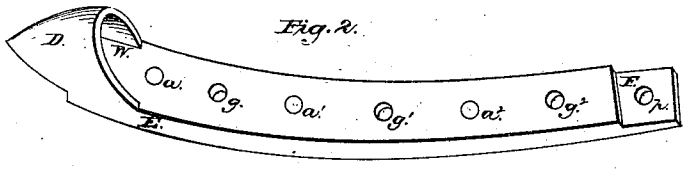


Fig. 3.

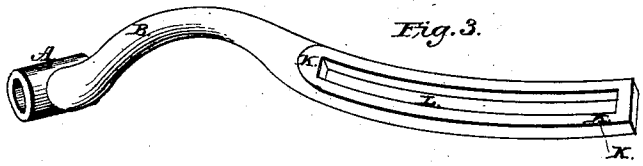
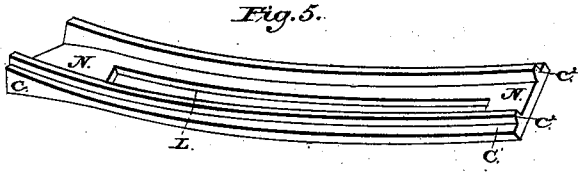


Fig. 4.



Fig. 5.



Attest:

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UNITED STATES PATENT OFFICE.

CHRISTIAN K. MELLINGER, OF HARRISBURG, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN WESLEY ANDERSON, OF FAIRFIELD, PENNSYLVANIA.

IMPROVEMENT IN EXTENSION BOW-IRONS FOR CARRIAGE-POLES.

Specification forming part of Letters Patent No. **193,263**, dated July 17, 1877; application filed June 14, 1876.

To all whom it may concern:

Be it known that I, CHRISTIAN K. MELLINGER, of the city of Harrisburg, county of Dauphin, and State of Pennsylvania, have invented certain Improvements in Extension Bow-Irons for Carriage-Poles, of which the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents one end of the carriage-pole bow with my improved extension-irons thereto applied. Figs. 2, 3, and 5 are detail views, representing, respectively, the socket-plate, the shackle, and the keeper; and Fig. 4 is a cross-section of the bow-irons, taken at P, Fig. 1.

My present application is an improvement on my patent of October 1, 1867, No. 69,356.

The shackle-plate, as formerly made and united with the bow or wood-work of the pole, was less elegant in appearance, as the finish was more or less defaced by the act of adjustment; and as the bolts in the elongated slots in the shackle-plate admitted of a degree of lost motion or slackness of fit, the parts would be less firmly united than is desirable; and the device also had less compass of adjustment than is requisite.

My present application is therefore designed to obviate all the foregoing objections, and to produce a superior article by the construction and arrangements of certain new and useful parts, consisting of, first, a socket or bed plate permanently attached to the under side of the bow, adapted to admit the wood into its socketed end, and to admit the shackle into a box securely and firmly clamped therein at its slotted end; second, a shackle slotted extensively in its body; third, a keeper-plate, suitably flanged to admit the shackle-bed, and to close the bed-plate box in manner to secure a neat exterior finish, and that need not be shifted in adjusting the shackle.

The bed-plate E D F (shown in Figs. 1, 2, and 4) is provided with the socket or cap W, into which the end of the bow H is fitted by tenon, in such manner as to dress flush exteriorly with the rounded form D of the socket, thus securing a firm and elegant joint. Said plate is also provided with holes g g^1 g^2 for the ordinary bolts m m' n n', by which the keeper-plate C C^1 is applied, and is provided with holes a a^1 a^2 for wood-screws, by which the bed is permanently attached to the under side of the bow H. Said bed-plate, at its inner end, has a splice-joint, F, in which is the screw-hole p, adapted to join the similar splice-joint F′ of the ordinary T-plate. Said bed-plate is made box form on its under side, having stepped side flanges E, between which the shackle-bed K″ is admitted, and on which the keeper C C^1 is applied, as shown in Fig. 4.

The recess at the bottom of the box is calculated to snugly admit the bed of the shackle, so that the bolts m n may pass loosely through the slot L of the shackle, and yet secure the shackle firmly to its place of duty simply by close confinement in the box by the keeper C C^1.

The shackle (shown in Fig. 3) is made with knuckle A, bent arm B, and bed K, extensively slotted at L to allow it to be extensively adjusted, and yet have both bolts m and n in the slot L. Moreover the front bolt and nut M M′ may be inserted at O, and the shackle and keeper-plate C C^1 set accordingly, when the reach or spread of shackle-clips requires the bow to be shortened or retracted extensively—as, for example, on sleighs.

The keeper-plate C C^1 is made lid form—the complement of the box on the bed-plate, as shown in Fig. 4. It has on it the flanges C^2, and between them the groove N, in the floor of which is the slot L′, corresponding with slot L of the bed-plate D E.

The flanges and grooves of the keeper-plate and those of the bed-plate are constructed, relatively to each other, so as to form, when united, a receptacle for the body K of the shackle of such exact depth that when the keeper C C^1 is forced down by the nuts m' n' to close the box the shackle will be clamped to place by the keeper, and it may be adjusted by a partial release of said nuts, after which it may again be clamped without removing the keeper-plate, thus preserving the paint or other surface of finish on the exterior of the device.

The operations have been explained *en passant*, and its merits are so obvious that no description can make more manifest its utility.

Having therefore fully and clearly set forth my invention, what I regard as new and useful I here embrace in the following claims:

1. The bed-plate E F, when provided with the socket D W, for the insertion therein of the end of bow H, substantially as and for the purpose set forth.

2. The bed-plate E F, provided with the splice-joint F, in combination with the T-plate F′, and the bow H, substantially as set forth.

3. The bed-plate E F and the keeper-plate C C^1, when provided with flanges E and C^2, respectively, and combined by bolts *m n* and nuts *m′ n′*, substantially as set forth, as a shackle-casing.

4. The bed-plate E F, shackle A B K, and keeper-plate C C^1, all constructed and applied as set forth, in combination with the bow H, as described.

In testimony that I claim the foregoing as my invention I have hereunto set my hand this 10th day of June, 1876.

CHRISTIAN K. MELLINGER.

Attest:

THEOPHILUS WEAVER,
PETER STUCKER.