

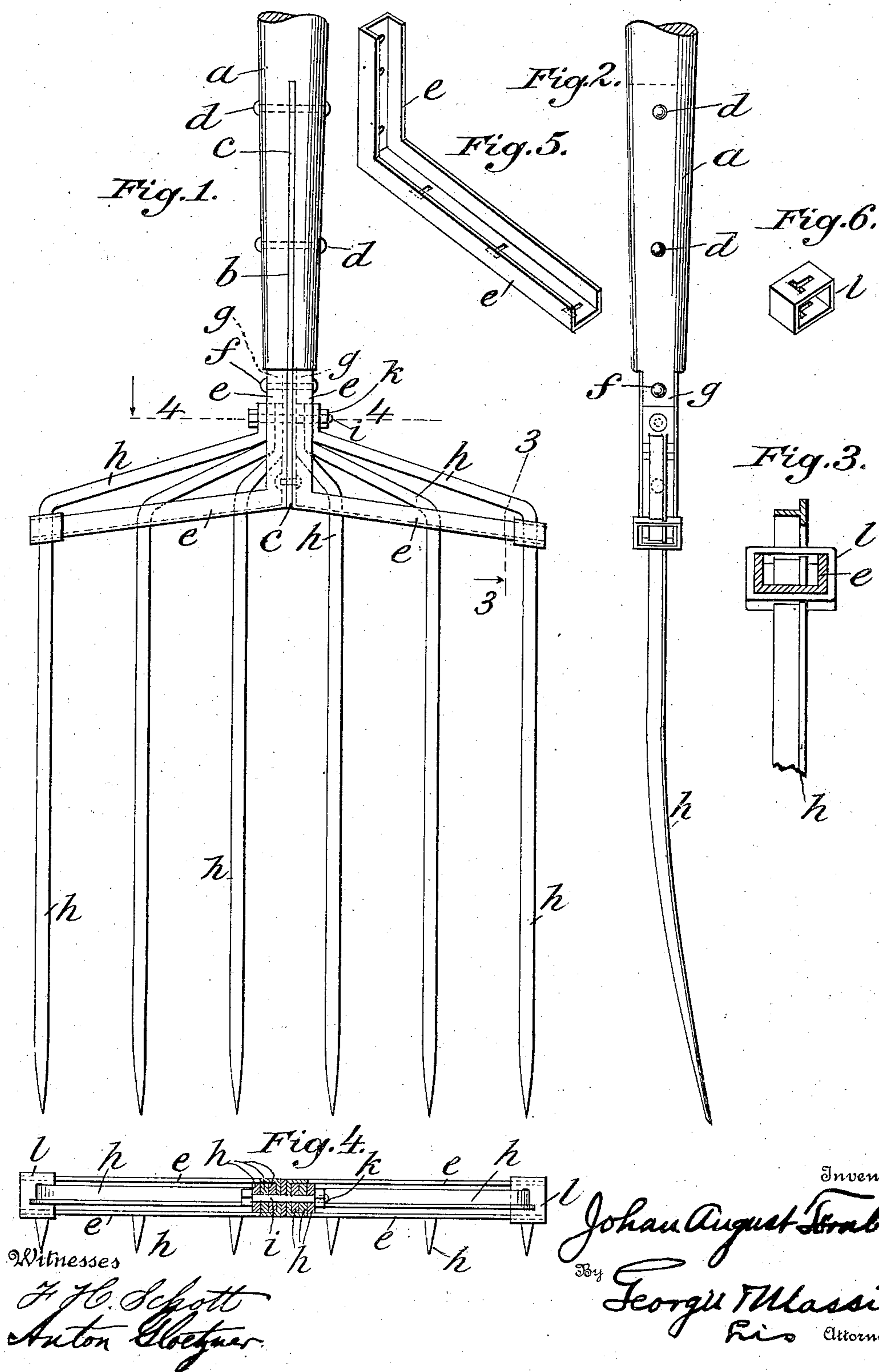
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PATENTED OCT. 13, 1903.

J. A. TÖRNBLOM.  
FORK.

APPLICATION FILED JUNE 9, 1903.

NO MODEL.



## UNITED STATES PATENT OFFICE.

JOHAN AUGUST TÖRNBLOM, OF ESKILSTUNA, SWEDEN.

## FORK.

SPECIFICATION forming part of Letters Patent No. 741,191, dated October 13, 1903.

Application filed June 9, 1903. Serial No. 160,779. (No model.)

*To all whom it may concern:*

Be it known that I, JOHAN AUGUST TÖRNBLOM, a subject of the King of Sweden and Norway, and a resident of Eskilstuna, in the Kingdom of Sweden, have invented certain new and useful Improvements in Forks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in forks; and the main object of the invention is to arrange the same in such manner that each prong by itself can easily be exchanged when necessary. The said object is attained by providing the shank of the fork with two arms projecting from its lower end in opposite directions and forming a cross-piece, in which are made holes at suitable distances, through which the prongs are passed, the upper ends of the said prongs being bent toward the shank and fixed to the same by means of a screw bolt and nut in a detachable manner.

In the accompanying drawings, Figure 1 is a front view of a pitchfork arranged in accordance with this invention. Fig. 2 is a side view of the same. Fig. 3 is a cross-section on the line 3 3 of Fig. 1, and Fig. 4 is a section on the line 4 4 of Fig. 1. Figs. 5 and 6 are enlarged detail views of parts to be hereinafter more fully described.

The lower end of the shank *a* is split or provided with a slit *b*. In the said slit a strip *c*, of steel or other suitable metal, forming a tang, is fixed by means of rivets *d*, passed through the shank. The lower end of the strip *c* projects beyond the end of the shank, and to the same are suitably fixed two angular arms *ee*, projecting in opposite directions and forming together a cross-piece on the shank *a*. The said arms *ee* are U-shaped in cross-section, Figs. 3 and 5 in the drawings. The upper short parts of the same are fixed to the strip *c* by means of rivets *ff*, the upper one being passed also through ears *g*, projecting from the shank *a* into the channels in the arms *e*, Fig. 2. In the outwardly-projecting parts of the arms *e* holes are provided at distances from each other corresponding to the distances between the prongs of the fork. The said prongs *h* are passed through the holes, and the upper parts of the prongs are so bent and of such a length that their

ends can be placed into the channels formed within the upper parts of the arms *e*, as shown. The prongs *h* are T-shaped in cross-section, but may obviously have any other suitable form. Their upper ends are flattened and provided with holes, through which and corresponding holes provided in the upper parts of the arms *e* and the strip *c* a screw-bolt *i* is passed, which in this manner, together with the arms *e*, holds the prongs in a firm position. For the purpose of imparting even greater rigidity a collar *l*, Figs. 3 and 6, is preferably provided, embracing the end of each arm *e* and provided with holes for the passage of the outer prongs. If one or more of the prongs *h* should be broken or damaged, a new one can easily be substituted for the same by unscrewing the nut *k* of the screw-bolt *i*, whereupon the broken prong can be removed from the said bolt and the arms *e* and a new one mounted in its place, as will be readily understood. Consequently if one or more of the prongs are broken the fork need not be condemned, but can be easily repaired in the described manner.

In the practical execution of the invention the arrangements shown in the drawings may obviously be modified in many respects without exceeding the limits of the invention.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fork, a shank, prongs having one end detachably secured thereto, and a cross-piece uniting said prongs at a point intermediate their ends.

2. In a fork, a shank, prongs having one end detachably secured thereto, and arms extending in opposite directions from said shanks and engaging each of said prongs at a point intermediate its ends.

3. In a fork, arms projecting from the lower end of the shank in opposite directions and provided with holes at suitable distances, and prongs passed through the said holes and having their upper parts bent toward the shank and bolted to the same.

4. In a fork, a tang fixed in the shank and projecting beyond its lower end, two angular arms projecting in opposite directions from the tang and provided at intervals with holes, prongs passing through said holes and hav-

ing their upper portion bent toward said tang, and means for detachably securing together the ends of the prongs and arms and the tang.

- 5 5. In a fork, a tang, fixed in the shank and projecting beyond its lower end, two angular arms fixed to the said tang and projecting in opposite directions from the same, and prongs passed through holes provided in the said  
10 outwardly-projecting arms and having their upper parts bent toward the said tang and fixed to the upwardly-directed parts of the arms and the tang by means of a screw-bolt passed therethrough.
- 15 6. In a fork, a tang fixed in the shank and projecting beyond its lower end, two angular arms U-shaped in cross-section secured to said tang and projecting in opposite direc-  
20 tions from the same, holes provided at intervals in said arms, prongs passing through said holes and having their upper ends bent toward the tang and lying within the chan-  
25 nel of the U-shaped arms, and means for detachably securing the upper ends of said prongs in position.
- 30 7. In a fork, a tang fixed in a split provided in the shank and projecting beyond the lower end thereof, two angular arms U-shaped in cross-section riveted to the said tang and pro-  
35 jecting in opposite directions from the same, and prongs, passed through holes in the outwardly-projecting portions of the said arms and having their upper ends bent toward the said tang and mounted in the channel of the  
vertical portions of the arms, and a screw-

bolt passed through holes in the ends of the prongs the said arms and the tang and holding the said parts together.

8. In a fork, a shank, arms U-shaped in cross-section projecting in opposite directions 40 from said shank and provided with holes, a collar embracing the outer end of each arm and provided with holes, and prongs passing through the holes in said arms and collar and having their upper ends bent toward said 45 shank and secured thereto.

9. In a fork, a tang secured within the lower end of the shank and projecting therefrom, angular arms U-shaped in cross-section se- 50 cured to said tang and projecting in opposite directions therefrom, holes provided at intervals in said arms, collars embracing the outer extremity of each of said arms and provided with holes adapted to register with the cor- 55 responding holes in said arms, prongs passing through the holes in said arms and collars and having their upper portions bent toward the shank with their ends overlying each other in the channel formed in the up- 60 per portion of the angular arms, and a screw-bolt passing through the ends of said prongs and arms and tang and securing the same to-  
gether.

In witness whereof I have hereunto signed my name in the presence of two subscribing 65 witnesses.

JOHAN AUGUST TÖRNBLOM.

Witnesses:

ERNST SVANGVISE,  
ROBERT APELGREN.