No. 58,915. Spike Extractor.
(Machine pour extraire les chevilletles.)


Artemus Welsh, Lawrence, Kansas, U.S.A., 2nd November, 1896 ; 6 years. (Filed 11th September, 1896.)
Claim.-1st. A spike extractor, composed of oscillating, spikegrasping jaws hinged together, a vertical fulcrum post, a pivot upon which the jaws oscillate, and an operating lever pivotaly connected with the fulcrum post, and a rib having a downwardlyextended, oppositely-inclined portion or wedgeat its lower extremity adapted to engage with the opposing sides of the rear ends of said jaws, as and for the purpose described. 2nd. A spike extractor, composed of oscillating, spike-grasping rocking jaws, said jaws having an intermediate hinged connection, a fulcrum post, a lever having its lower end pivotally connected with said fulcrum post, and a wedge at the extremity of the lower end of said levpr, and a laterally extended bar on the said fulcrum post, as and for the purpose described. 3rd. The combination with the opposing jaws having rocker-bearing surfaces, and provided with int-rulediate hinged portions of a fulcruns post having a pin which passes through said portions and forms a common pivot for both jaws, and a lever journalled on the fulcrum post having a downwardly and rear-wardly-extended wedge-shaped portion adapted to enter between the rear ends of said jaws. 4th. In a spike extractor, composed of oscillating, spike-grasping jaws, an intermediate binged connection consisting of an intermediate vertical pivot, a cap plate upon the upper end of said pivot and a nut upon the lower end, and journalled circular grooves and flanges upon the upper and lower surfaces of said jaws and the under surface of said cap and nut respectively. 5th. A spike extractor, composed of oscillating, spike-grasping jaws, and an intermediate pivot, a cap upon the upper end of said pivot and a nut on the lower end, a fulcrum post on said cap and an operating lever pivotally connected with said fulcrum post, a rib on said lever having a wedge at its extremity extending between the rear ends of said oscillating jaws, and jointed circular grooves and flanges on the upper and lower surfaces of the said jaws and the respective inner surfaces of said cap and nut, as and for the purpose described. 6th. In a spike extractor, the combination with the oscillating, spike-grasping jaws having grooves in the upper and lower surfaces of said jaws in the arc of a circle, an intermediate vertical pivot concentric with said grooves, a cap plate upon the upper end of said pivot and a nut on the lower end, and a fulcrum post on said cap, and an operating lever having its lower end extending to the upper surface of said cap and its rear edge inclined rearwardly and upwardly and a rib on the said lever extending in the direction of rnd between the rear ends of said jaws, having oppositely-inclined sides, annular flanges on the under side of said cap plate and the upper side of said nut extending within the grooves in the upper surfaces of the respective jaws and nut, as and for the purpose described. 7th. In a spike extractor, the combination with the oscillating, spike-grasping jaws, having downwardly and rearwardly-inchined bearing surfaces at their forward ends and an intermediate vertical pivot, a cap plate upon the upper end of said pivot, a fulcrum post upon said cap plate, an operating lever pivotally connected with said fulcrum post, a rib connected with the lower end of said lever and extending between the rear ends of said jaws, having circular grooves in the under surfaces and a bearing for said jaws connected with the lower end of said pivot, and an annular upwardly-extended flange on the upper side of said bearing extending within the circular grooves in the respective jaws, as and for the purpose described. 8th. In a spike extractor, the combination with the oscillating, spike grasping jaws of an internediate hinged connection and a spring for throwing the forward ends together, as
described. 9th. The combination in a spike extractor with the oscillating hinged jaws, of the vertical fulcrum post, and operating lever pivotally connected with the upper end of said fulcrum post, and having a downwardly extended rib and a wedge at the lower extremity of said rib, lugs on the outer side and rear end of one of said jaws and a spring plate connected at one end with the pivot on the fulcrum post, and the lower end extending between said lugs on said jaw, as and for the purpose described.
No. 53,016. Edge Tool. (Outil tranchant.)


Joseph R. Mann, Lewiston, Pennsylvania, U.S.A., 2nd Noveınber, 1896; 6 years. (Filed 12th September, 1896.)
Claini.--1st. As a new article of manufacture, an edge tool composed of a plurality of metals or grades of metal, reduced to a smooth surface, and in which the true temper colour of each metal, having entire surface of each metal whed in regular uniformity upon the article of manufacture, an wherever exposed. 2nd. As a new metals, or grades of metal edge tool composed of a plurality of which true temp r colour of each math surface, and in heat, is oxhibited in regular uniformity upon theen developed by each metal wherever exposerl, the smog upon the entire surface of provided with a coat of varnish.

## No. 53,017. Weighing Scale. (Balance à bascule.)



Alpha Reeve Beal, East Bloomfield, New York, U.S.A., 2nd November, 1896; 6 years. (Filed 14th Septtmber, 1896.)
Cluim.--1st. In a weighing scale, the combination of a bed plate B, a carriage $C$ movable forward and back thereon, a scale beam $\mathrm{E}_{1}$ attached to the carriage and provided with a scale, a poise $\mathbf{H}$ through which the scale beam slides, a rack $K$ whose teeth are wedge-shaped and spaced to accord with the divisions of the scale on the beam, a pawl Lengaging with the rack, and nueans for operating the pawl, the whole so arranged, as described, that the engagement of the pawl with the teeth of the rack will move the carriage and adjust the divisions of the scale accurately with the poise, as specitied. and. In a weighing scale, the combination of a bed plate $B$, a carri age $C$ movable forward and back thereon, a scale beam E , a carovided with a scale attached to the carriage, a poise $H$ through which the spaced to accord with the $K$ whose teeth are wedge-shaped and spaced to accord with the divisions of the scale on the beam, a pawl L engaging with the rack, a cam and shaft for operating the pawl, a locking attachment connected with the prise, and means for operating the locking attachment, the whole so arranged, as described, that the engagement of the pavil with the rack will move the carriage and adjust the divisions of the scale accurately with the poise, and the poise will then be Jocked to the scale beam, as specified. 3rd. In a weighing scale, the combination of a movable carriage $\mathbf{C}$, wise $H$ through which thereto so as to move with the carriage, a with the $\begin{aligned} & \text { whise } \\ & \text { wough which the scale beam slides, a gib } \mathrm{N} \text { connected }\end{aligned}$ with the poise, provided with slotted pins, slides with wedgeslides and means for actuating the clams, a clamp operating on the slides and means for actuating the clamp, as sperified.

