

Search history

Search 1: SFT=(wedge and (excavat* or digger or backhoe or bulldozer)) and IC=(E02F) (Results 1679)

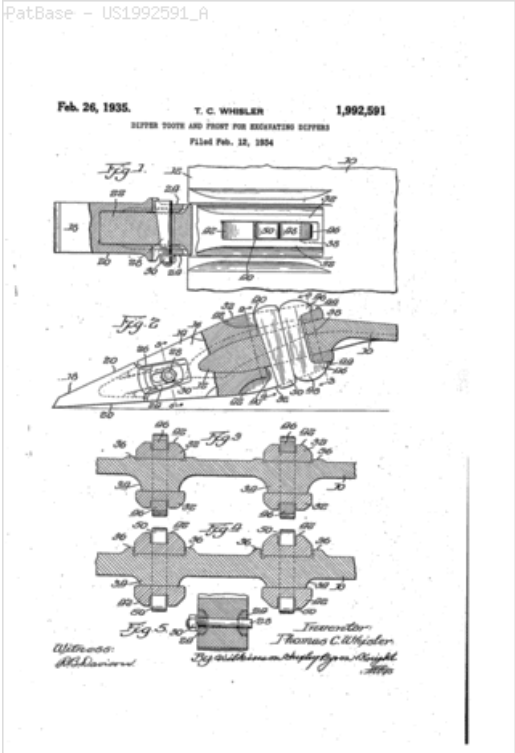
Search 2: 1 and (C near clamp) (Results 48)

Search 3: 2 and PD<20140227 (Results 40)

Title: DIPPER TOOTH AND FRONT FOR EXCAVATING DIPPERS

Abstract: 1. In a digging tooth construction, a tooth receiving base, a bifurcated tooth member having jaws seating on oppositely presented faces of said base, said jaws being formed with oppositely disposal longitudinally inclined outer faces and locking means comprising a C-clamp and a wedge pin, both extending through the jaws and the intervening base, said C-clamp having jaws engaging the outer inclined faces of the tooth jaws and said wedge pin forcing said C-clamp in a direction to draw the tooth jaws together upon the base.

Classifications:
International (IPC 8-9): E02F9/28 (Advanced/Invention); E02F9/28 (Core/Invention)
International (IPC 1-7): E02F9/28
CPC: E02F9/2825 E02F9/2833
European: E02F9/28A2B E02F9/28A2C
US: 37/456



Family:

Publication number	Publication date	Application number	Application date
US1992591 A	19350226	US19340710773	19340212

Priority:
US19340710773 19340212

Probable Assignee: AMERICAN MANGANESE STEEL CO
Assignee(s): (std): AMERICAN MANGANESE STEEL CO
Assignee(s): AMERICAN MANGANESE STEEL COMPANY
Inventor(s): (std): WHISLER THOMAS C

Title: RETAINER PINS FOR DIPPER TEETH

Abstract: (Claim 1) 1. A retaining pin for separable parts of a dipper tooth or the like comprising a generally C-shaped member having an elongated shank and relatively short top and bottom extensions projecting forwardly from the shank and said recesses each having a forward wall, a wedge disposed between said extensions, said wedge having projections at the top and bottom thereof respectively fitting loosely in said recesses and adapted to abut the forward walls of the respective recesses so as to limit displacement of the wedge outwardly in a forward direction in respect of the C-shaped member, and resilient means interposed between the opposed faces of the C-shaped member and the wedge to normally urge the wedge outwardly toward its limit position.

Classifications:

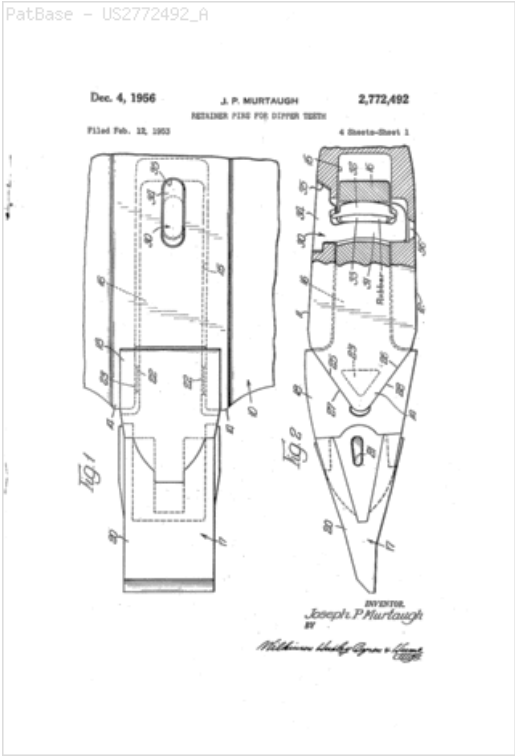
International (IPC 8-9): E02F9/28 (Advanced/Invention);
E02F9/28 (Core/Invention)

International (IPC 1-7): E02F9/28

CPC: E02F9/2841

European: E02F9/28A2C2

US: 37/457 411/512



Family:

Publication number	Publication date	Application number	Application date
US2772492 A	19561204	US19530336498	19530212

Priority:

US19530336498 19530212

Probable Assignee:

AMERICAN BRAKE SHOE CO

Assignee(s): (std):

AMERICAN BRAKE SHOE CO

Assignee(s):

AMERICAN BRAKE SHOE COMPANY

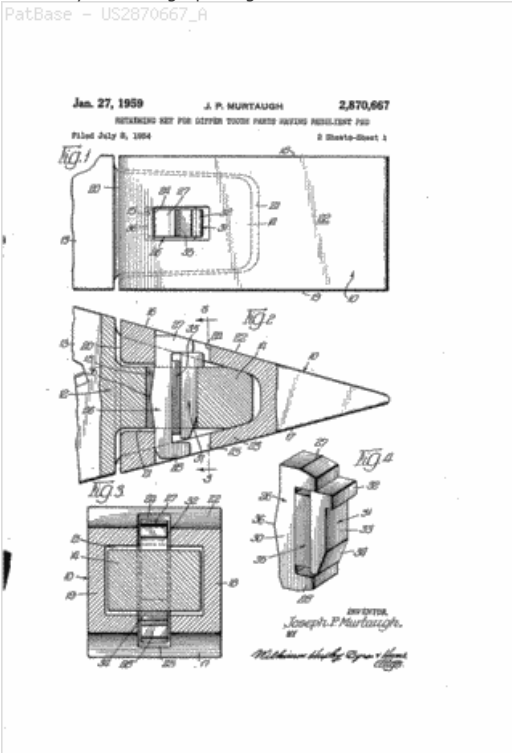
Inventor(s): (std):

MURTAUGH JOSEPH P

Title: RETAINING KEY FOR DIPPER TOOTH PARTS HAVING RESILIENT PAD

Abstract: (Claim 1) In a retaining key member insertable in a key-receiving_ opening of an assembly of dipper tooth parts, a substantially C-shaped **clamp** having an elongated body with spaced apart upper and lower forwardly projecting portions at the respective ends thereof, said projections thus defining a recess on the forward side of said elongated body and the upper one of said projections constituting a .-ib head adapted to be impacted by a hammer blow, an elongated **wedge** member of generally inverted L-shape disposed in said recess, said **wedge** member having at the upper end thereof a forwardly projecting portion constituting a gib head, the forwardmost portions of said **wedge** gib head extending forwardly beyond the forwardmost end of the clamp gib head and the rearward portions of the **wedge** gib head being disposed under and in alignment with the clamp gib head in closely spaced proximity thereto so that such ham_n-r blow delivered to the clamp gib head is transmitted d__rectly and substantially instantaneously to the **wedge** gib head, an elongated pad of resi ent material interposed between opposed surfaces of said clamp and wed.-e and having the longitudinal axis thereof disposed parallel to the longitudinal axes of said clamp and **wedge**, all portions of said resilient pad being cOmpletely confined wiihin said' -recess. said. resilient pad being placed under compression du,ring insertion of said key in said key-receiving. op;,,.'u'ng, the lower end of -said **wedge** opposite the gib,,heaa ihere6f being disposed r) _Lbove and in alignment with'an opposed siirfa_e of the lower projection on said clamp, whereby a hammer -blow delivered to, -the 'lower _projection of said clanip is transmitted direcily to the 16wer end 6f said **wedge**, the forward face bk 'the **Wedge** at lowbr - end portions thereof ili being, __b-evelled rearwardly in a downwardly proceeding dii-ectioii to facilitate entry of the key into said keyreceiving opening, and the rear face of said body having an angled rearwardly extended protuberance formed thereon between the opposed ends thereof to cooperate with a complementary recess in one of the dipper tooth parts inwardly of said keyreceiving opening to prev,-nt displacement of the key from said key-receiving opening.

Classifications:
International (ipc 8-9): E02F9/28 F16B21/12 (Advanced/Invention); E02F9/28 F16B21/00 (Core/Invention)
International (ipc 1-7): E02F9/28 F16B2/14
CPC: E02F9/2841 F16B21/12
European: E02F9/28A2C2 F16B21/12
US: 37/457 411/512



Family:

Publication number	Publication date	Application number	Application date
US2870667 A	19590127	US19540441973	19540708

Priority:

US19540441973 19540708

Probable Assignee: AMERICAN BRAKE SHOE CO
Assignee(s): (std): AMERICAN BRAKE SHOE CO
Assignee(s): AMERICAN BRAKE SHOE COMPANY
Inventor(s): (std): MURTAUGH JOSEPH P

Title: **EXCAVATING** TOOTH STRUCTURE

Abstract: (Claim 1) 1. In an **excavating** tooth structure, a base having a forwardly projecting point-mounting nose with forwardly convergent upper and lower faces and with a transverse passage opening at said faces, said passage having enlarged upper and lower ends forming clearance spaces, a tooth point having forwardly convergent upper and lower wall portions forming between them a rearwardly opening tapered socket in which said nose has a :Qing telescopic fit, said tooth point wall portions having respective recsses at their inner faces rcgistrable with the opposite ends of said nose passage, each tooth point recess presenting a forwardly facing rear shoulder, an elongated resilient retainer comprising a spring metal plate extending longitudinally in said nose passage and having rearwardly dciiectable opposite ends forming rearwardly curved spring tongues normally engaged in said tooth point recess to prevent inadvertent withdrawal of said tooth point Irom said nose, said retainer being frictionally engageable with the front and rear walls of said passage, said tongue-forming retainer ends being rearwardly and inwardly deflectable into the clearance spaces at the ends of said nose passage by cam action of the forwardly con~ vergent inner faces of said point socket on said retainer ends during relative displacement of said point over said nose into seating engagement with said nose.

Classifications:

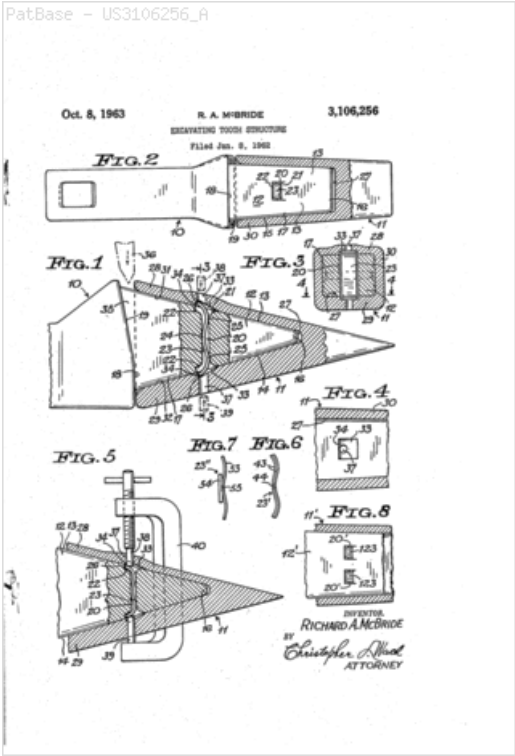
International (ipc 8-9): E02F9/28 F16B2/24 (Advanced/Invention);
E02F9/28 F16B2/20 (Core/Invention)

International (ipc 1-7): A01B15/04 E02F9/28

CPC: E02F9/2891 F16B2/243

European: E02F9/28L F16B2/24B2

US: 172/750 37/458 411/352 411/516



Family:

Publication number	Publication date	Application number	Application date
US3106256 A	19631008	US19620164744	19620108

Priority:

US19620164744 19620108

Probable Assignee:

MCBRIDE RICHARD A

Assignee(s): (std):

MCBRIDE RICHARD A

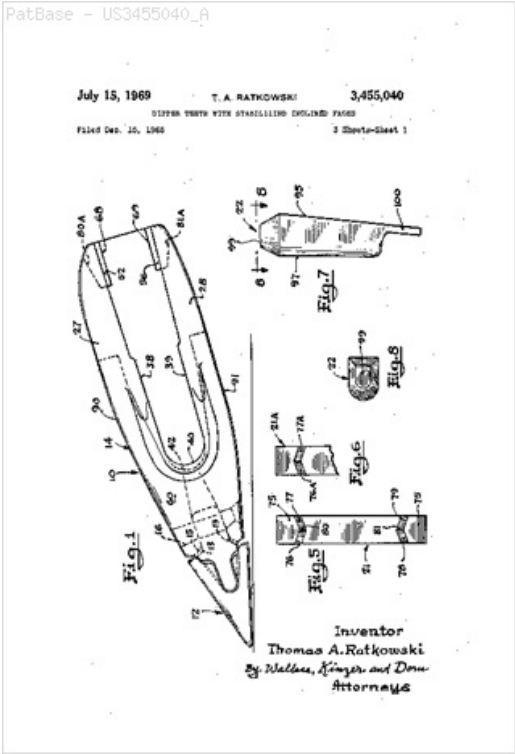
Inventor(s): (std):

MCBRIDE RICHARD A

Title: DIPPER TEETH WITH STABILIZING INCLINED FACES

Abstract: ABSTRACT OF THE DISCLOSURE
Excavating dipper including a lip and a removable tooth having bifurcated jaws, wherein the mating surfaces of said jaws and lip have inclined faces for stabilizing the tooth against lateral displacement.

Classifications:
International (IPC 8-9): E02F9/28 (Advanced/Invention)
International (IPC 1-7): E02F9/28
CPC: E02F9/28 E02F9/2833
European: E02F9/28 E02F9/28A2C
US: 37/456



Family:

Publication number	Publication date	Application number	Application date
FR1501440 A	19671110	FR19660084515	19661122
GB1115099 A	19680522	GB19660048939	19661101
US3455040 A	19690715	US19650514021	19651215

Priority:

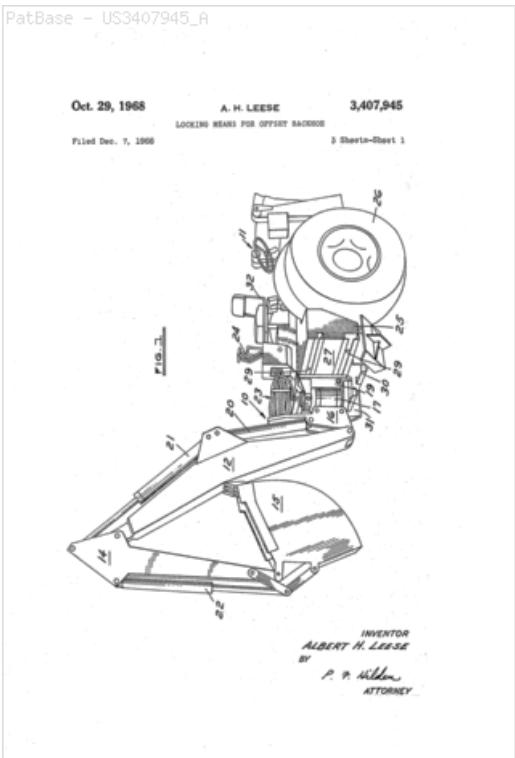
US19650514021 19651215

Probable Assignee: ABEX CORP
Assignee(s): (std): ABEX CORP
Inventor(s): (std): RATKOWSKI THOMAS A
Inventor(s): THOMAS A RATKOWSKI

Title: Locking means for offset **backhoe**

Abstract: ABSTRACT OF THE DISCLOSURE
A locking means for the carriage of an adjustable offset **backhoe** of the type including a transverse frame having a pair of C-shaped slots and expansible blocks within the slots for supporting the carriage and holding it against movement along the slots is actuated by tightening the bolts holding the carriage against the frame. Preferably, a cam surface on each of the blocks laterally expands the blocks upon tightening the bolts so that the blocks tightly engage opposing side walls of the C-shaped

Classifications:
International (IPC 8-9): E02F3/32 E02F3/38 (Advanced/Invention);
E02F3/28 E02F3/36 (Core/Invention)
International (IPC 1-7): E02F3/30
CPC: E02F3/386
European: E02F3/38B4
US: 414/695



Family:

Publication number	Publication date	Application number	Application date
US3407945 A	19681029	US19660599770	19661207

Priority:
US19660599770 19661207

Probable Assignee: FORD MOTOR CO
Assignee(s): (std): FORD MOTOR CO
Assignee(s): FORD MOTOR COMPANY
Inventor(s): (std): HAROLD LEESE ALBERT ; LEESE ALBERT HAROLD

Title: CUTTING EDGE FOR **EXCAVATING** DEVICES

Abstract: ABSTRACT OF THE DISCLOSURE

An **excavating** device scoop wherein the lip is equipped with forwardly extending **excavating** teeth which additionally serve to confine wear shrouds.

Classifications:

International (IPC 8-9): E02F9/28 (Advanced/Invention);

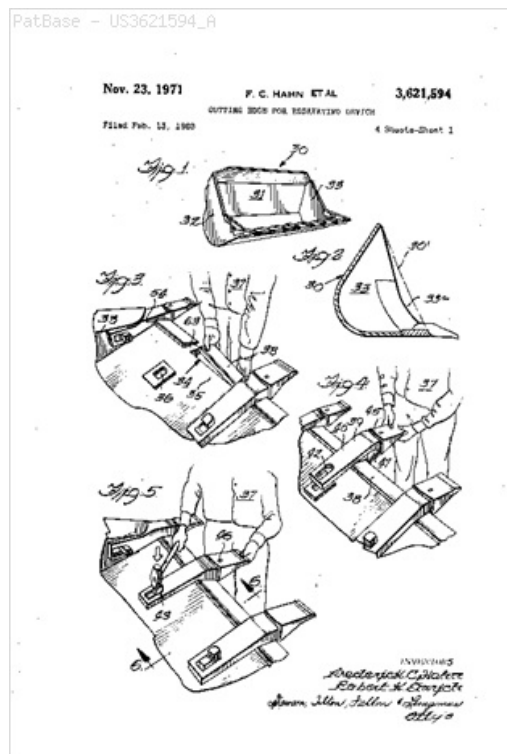
E02F9/28 (Core/Invention)

International (IPC 1-7): E02D E02F9/00 E02F9/28

CPC: E02F9/2808

European: E02F9/28A

US: 37/451 37/453 37/457



Family:

Publication number	Publication date	Application number	Application date
BE745621 A	19700716		00000000
BE745621 A1	19700716	BE19700745621	19700206
BR7016703 A0	19730605	BR19700216703	19700212
DE2006657 A1	19700903	DE19702006657	19700213
DE2006657 B2	19790111	DE19702006657	19700213
DE2006657 C3	19790906	DE19702006657	19700213
ES376518 A1	19720416	ES19700376518	19700212
FR2035317 A5	19701218	FR19700004857	19700211
GB1292795 A	19721011	GB19700003319	19700123
JP50002924 B4	19750130	JP19700012546	19700212
US3621594 A	19711123	US19690798953	19690213

Priority:

US19690798953 19690213

Probable Assignee: ESCO CORP

Assignee(s): (std): ESCO CORP

Assignee(s): ESCO CORP 2141 N W 25TH AVENUE PORTLAND OREGON E ; ESCO CORP 2141 N W 25TH AVENUE PORTLAND OREGON E U A ; ESCO CORP PORTLAND OREG V ST A

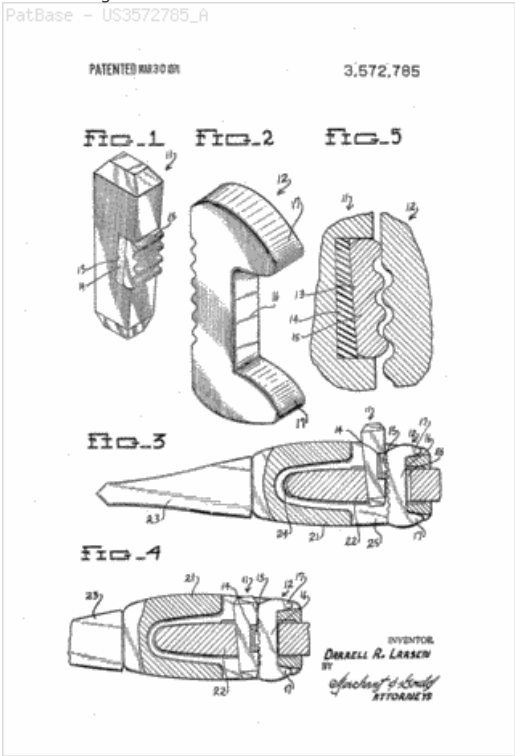
Inventor(s): (std): HAHN F C ; EMRICH R K ; KENT ROBERT ; HAHN FREDERICK CHARLES ; HAHN FREDERICK C ; HAHN F ; EMRICH ROBERT K ; EMRICH R

Inventor(s): FREDERICK C HAHN ; HAHN FREDERICK CHARLES BEAVERTON ; F C HAHN ; FC HAHN ; R K EMRICH ; RK EMRICH ; ROBERT K EMRICH ; KENT ROBERT PORTLAND

Title: CONNECTING APPARATUS FOR POWER SHOVEL TOOTH ADAPTERS

Abstract: (Claim 1) 1. 1. Apparatus for removably connecting two separable parts, the parts fitting together in overlapping relation and each having an opening, the openings being alignable to form continuous passage when the parts are brought together, the connecting apparatus comprising: a. an elongated block having projections extending laterally from either end, the projections being of such length as to permit insertion of the block into the continuous passage, and spaced to receive therebetween one of the two parts, the back side of the block having undulations formed therein; b. a wedge dimensioned for insertion into the passage in wedging relation between the block and the other of the two parts, one side of the wedge having a recess intermediate its ends, the recess being lined with a resilient pad of a predetermined thickness; c. and a block-engaging member disposed in the recess and having an undulated block-engaging face for matable engagement with the undulations in said block, the block-engaging member constructed and arranged for

Classifications:
International (IPC 8-9): E02F9/28 (Advanced/Invention); E02F9/28 (Core/Invention)
International (IPC 1-7): B25G3/36 E02F9/28
CPC: E02F9/2841 Y10T403/7066
European: E02F9/28A2C2
US: 287/103 37/457 403/374.2 411/512



Family:

Publication number	Publication date	Application number	Application date
US3572785 A	19710330	US19690887065	19691222

Priority:

US19690887065 19691222

Probable Assignee: ME INT
Assignee(s): (std): MINNEAPOLIS ELECTRIC STEEL CAS
Assignee(s): MINNEAPOLIS ELECTRIC STEEL CASTINGS CO ; ME INT
Inventor(s): (std): LARSON DARRELL R
Inventor(s): DARRELL R LARSON

Abstract: A replaceable bushing capable of self-supporting seating in the aperture of an excavator lip whereby worn bearing areas are easily and mechanically replaced, and thereby function better to support and tie an adapter or other excavating teeth components to the excavator.

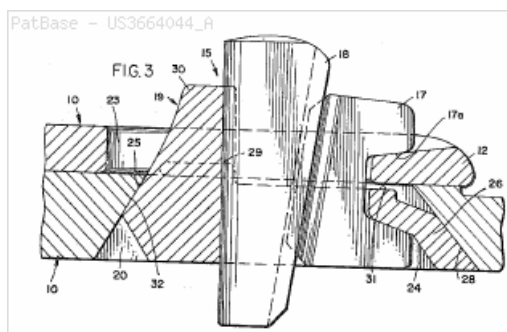
International (IPC 8-9): E02F9/28 (Advanced/Invention);

International (IPC 1-7): E02F9/28

CPC: E02F9/2833 Y10T16/05

European: E02F9/28A2C

US: 16/2 16/2.1 37/142R 37/456



Publication number	Publication date	Application number	Application date
US3664044 A	19720523	US19700085409	19701030

US19700085409 19701030

Probable Assignee:

ESCO CORP

Assignee(s): (std):

ESCO CORP

Inventor(s): (std):

HAHN FREDERICK C

Inventor(s):

FREDERICK C HAHN

Title: CONNECTING APPARATUS FOR TOOTH ADAPTER ASSEMBLY

Abstract: Apparatus for removably connecting a **digger** tooth adapter to an **excavating** shovel. The adapter and lip of the shovel fit together in overriding relation, with openings in each aligning to form a passage which receives a **C-shaped clamp** and **wedge**. The back side of the **C-clamp** has a rectangular recess which receives a locking member. The locking member has an exposed face which is serrated, and it is urged out of the recess by a resilient mounting pad. The **wedge** also has a serrated face which mateably engages the locking member. To simplify removal of the adapter from the shovel, a longitudinal groove is formed in the engaging face of the **wedge** which extends through and below the serrations. A partial groove is formed in the **C-clamp**, and the grooves together guidably receive a spike therebetween which, upon insertion, separates the respective serrated faces and enables the **wedge** to be removed.

Classifications:

International (IPC 8-9): E02F9/28 F16B2/14

F16B3/00 (Advanced/Invention);

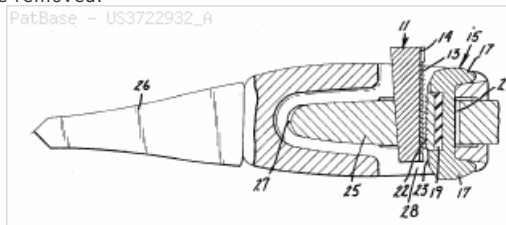
E02F9/28 F16B2/02 F16B3/00 (Core/Invention)

International (IPC 1-7): F16B2/14 F16B3/00 F16B7/00

CPC: F16B2/14 E02F9/2841 F16B3/00 Y10T24/44009 Y10T403/7018 Y10T403/7086 Y10T403/75

European: E02F9/28A2C2 F16B2/14 F16B3/00

US: 24/456 287/10.3D 312/111 312/140 37/457 403/355 403/379.4 403/408.1 411/512



Family:

Publication number	Publication date	Application number	Application date
US3722932 A	19730327	US19710197243	19711110

Priority:

US19710197243 19711110

Probable Assignee: ME INT

Assignee(s): (std): MINNEAPOLIS ELECTRIC STEEL CAS

Assignee(s): MINNEAPOLIS ELECTRIC STEEL CASTINGS CO US ; ME INT

Inventor(s): (std): DOUGALL J

Inventor(s): DOUGALL J US