

Search history

Search 1: STAC=((tube* or mandrel*) and (soil* or ground*)) (Results 119972)

Search 2: 1 and PD<20130905 (Results 97804)

Search 3: 2 and teeth (Results 1923)

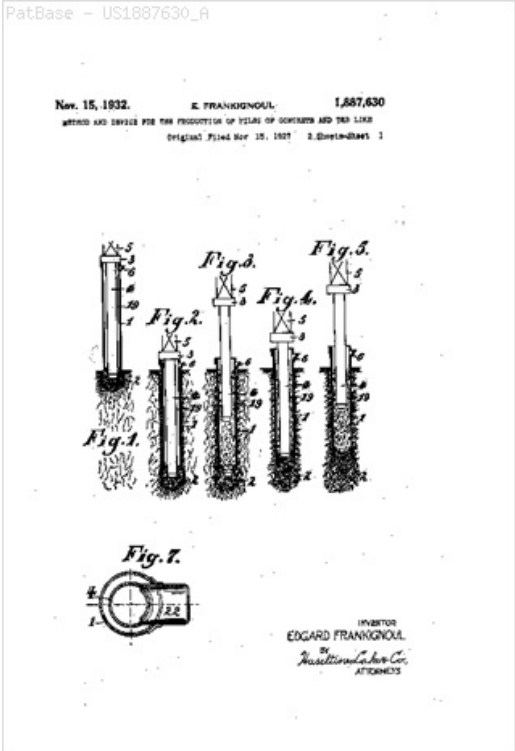
Search 4: 3 and (pier* or pile* or pillar* or column*) (Results 278)

Search 5: STAC=(4) and CPC=(E02D) (Results 31)

Title: Method and device for the production of **piles** of concrete and the like

Abstract: Source: GB281678A **Piles** and piling.-The shell 1 of a preparatory **pile** and a ram 4 are driven into the **ground** at the same time by a monkey 5 acting on an anvil 3 which is rigid with the ram 4 and rests upon the upper end of the shell 1, the ram and shell being provided with distance pieces to guide and support one another. When the shell 1 has been driven down, as in Fig. 2, a portion of concrete mixture is fed through a shoot 6 at the top of the shell into the space 19 between the ram, which has been raised as in Fig. 3, and the shell to permit the concrete to pass to the space below the ram, means such as pins, **teeth**, or movable projections, which are retracted on upward movement of the ram, being provided on the ram to facilitate downward passage of the concrete, or a few blows may be given to the raised ram for this purpose. The concrete is beaten down by the ram, the shell being simultaneously raised by lifting-cables, until their tops are again level, when the ram is again lifted to form a further portion of the **pile**. Instead of feeding the concrete below the ram through the space 19, it may be fed from a hollow ram, a valve being provided in the base to permit its escape when the ram is lifted, or concrete may be supplied both from the ram interior and through the space 19. A water-injection duct leading through the ram to the base may be provided to facilitate sinking by flushing or to pass a charge of water to the concrete. If the ram is hollow to feed the concrete alone, its lower end may be formed as a restricted opening formed in a cap block secured to the lower end of the ram. In a form having a hollow ram the feeding shoot for the concrete projects into the hollow ram from the shell and carries a stirrer to facilitate the downward movement of the concrete. The lower end of the shell may be capped with a concrete block 2 which is left in the **ground**.

Classifications:
International (IPC 8-9): E02D15/04 E02D5/38 E02D7/30 (Advanced/Invention); E02D15/00 E02D5/34 E02D7/00 (Core/Invention)
International (IPC 1-7): E02D15/04 E02D5/38 E02D7/30
CPC: E02D5/385 E02D7/30 E02D15/04
European: E02D15/04 E02D5/38B E02D7/30
US: 175/293 405/242



Family:

Publication number	Publication date	Application number	Application date
CH130358 A	19281215		19271107
FR647266 A	19281122		19271103
GB281678 A	19280607	GB19270032307	19271130
US1830651 A	19311103	US19270233445	19271115
US1858204 A	19320510	US19310567169	19311006
US1887630 A	19321115	US19310567170	19311006

Priority:

19261130 US19270233445 19271115 US19310567169 19311006
US19310567170 19311006

Probable Assignee: FRANKIGNOUL PIEUX ARMES

Assignee(s): (std): FRANKIGNOUL PIEUX ARMES

Assignee(s): COMPAGNIE INTERNATIONALE DES PIEUX ARMES FRANKIGNOUL STE AME ; COMPAGNIE INTERNATIONALE DES PIEUX ARMES FRANKIGNOUL SOCIETE ANONYME ; INT DES PIEUX ARMES FRANKIGNOUL COMP ; INT DES PIEUX ARMES FRANKIGNOUL STE AME COMP ; INT DES PIEUX ARMES FRANKIGNOUL SOC ANONYME COMP ; COMPAGNIE INTERNATIONALE DES PIEUX ARMES FRANKIGNO ; COMPAGNIE INTERNATIONALE DES PIEUX ARMES FRANKIGNOUL

Inventor(s): (std): EDGARD FRANKIGNOUL

Inventor(s): INT DES PIEUX ARMES COMP ; INT DES PIEUX ARMES FRANKIGNOUL STE AME COMP ; COMPAGNIE INTERNATIONALE DES PIEUX ARMES FRANKIGNO ; COMPAGNIE INTERNATIONALE DES PIEUX ARMES FRANKIGNOUL STE AME ; FRANKIGNOUL EDGARD

Title: Improvements in or relating to the manufacture of reinforced concrete **piles**

Abstract: Source: GB301932A **Piles**.-Armoured-concrete screw **piles**, or the tubular preparatory **piles** in which such **piles** are cast, are combined with tapering shoes, forming points, provided with helical excavating wings or vanes, and through which water or cement may be forced. Fig. 3 shows a shoe or point consisting of a centering point 5 and screw vanes 4, rods or straps 3 connect it to the body a concrete **pile**, and passages 6 are provided for the issue of water and c. In a modification, the shoe has an axial hole 7, Fig. 5, with notched or serrated edges, down which passes a rod or **tube** of similar section provided with a boring-bit also provided with apertures, such as 6, Fig. 3. In the casting of **piles** in situ, by means of concrete under air pressure, concrete and c. shoes are arranged to close the lower end of a hollow removable casing 10, Fig. 10, being connected to it by **teeth** 11, such that the shoe is left in the **ground** when the casing is raised. The armouring of the **pile** may consist of longitudinal bars 12, horizontal ties 13, and helical windings 14, Fig. 9; the bars 12 at their lower ends are formed into hooks 15, to which the straps 3, Fig. 8, of the shoe are attached.. Water or cement passages 16, leading from the axial passage 17, Fig. 9, are also formed. There may also be used an armoured concrete screw, the length of which is less than the depth of the hole to be made. The Specification as open to inspection under Sect. 91 (3) (a) contains also a description of a basement-carrying " pole " or **pile**, shown in Fig. 14 (Cancelled). This subject-matter does not appear in the Specification as accepted.

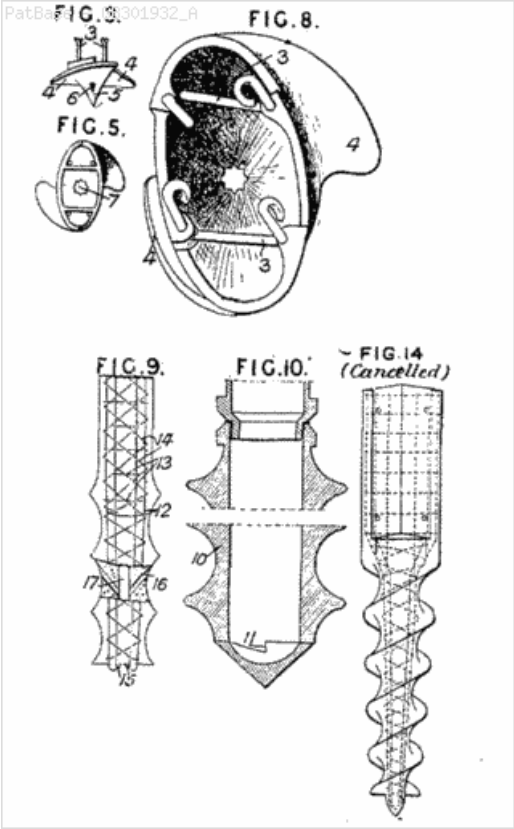
Classifications:

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International (IPC 1-7): E02D5/56 E02D5/72

CPC: E02D5/56 E02D5/72

European: E02D5/56 E02D5/72



Family:

Publication number	Publication date	Application number	Application date
GB301932 A	19291024	GB19280036248	19281208

Probable Assignee: GUSTAVE GRIMAUD

Assignee(s): (std): GUSTAVE GRIMAUD

Title: Improvements in ramming devices and methods of use in constructing concrete piles and the like

Abstract: Source: GB487057A 34315. [Class 68 (ii)] A ramming device adapted to be inserted into a preparatory tube in the construction of concrete piles, comprises a wedge-like gripping member 4, Fig. 1, adapted to engage the inner wall of the tube 5, and one or more auxiliary wedges 3 disposed between the member 4 and the body 1 of the ram, so arranged that when engaging, relative movement takes place principally between the member 4 and the wedge 3, and when releasing, the initial relative movement takes place between the body of the ram and the wedge 3. The ram is provided with a reaction member consisting of a toggle 6 pivoted on a loose pin 8 and having teeth 9 to engage the tube 5. The toggle 6 is pivoted to a link 11 having at its upper end shoulders 12 and 13. The suspending ropes 15 are connected to the link 11 and to the wedge 3. Upward movement of the link 11 is limited by contact of a distance piece 16 on the shoulder 13 with the head of the body 1, and upward movement of the wedge 3 is limited by resilient packing 21 making contact with a pin 18 in the body 1, while downward movement is limited by a shoulder 19. The base of the ram is formed with a threaded hole for a plug 25 which may be replaced with a cutter for taking samples of ground. A modified form of ram is shown in Fig. 6. In this form, the reaction member 9 is retained and guided by pins 8 and 32, and its downward movement is limited by the buffer 23 which bears on resilient washers 37. In operation, the ram is lowered by the rope 15, the wedge 4 being retracted, and, in the form shown in Fig. 1, the toggle 6 raised. When the ram comes into contact with the concrete in the tube 5, the member 4 slides down and makes contact with the tube. If the tube is now driven downwards, an upward pressure is exerted on the base of the ram, and the wedge 3, carried upwards by contact of the shoulder 20 with the shoulder 19, presses the wedge 4 against the tube and exerts a corresponding pressure on the toggle 6 or the reaction member 9, the buffer stop 23 yielding slightly. When the upward pressure on the plug 25 is removed, e.g. by giving an upward blow to the tube 5, the ram is released, initial movement starting between the body and the wedge 3, and moves downwardly till it again rests on the concrete. By a reciprocating movement of the tube 5, the ram may thus be caused to move down the tube and force the concrete downwardly. In making a concrete pile, the tube 5, Fig. 9, is driven with the ram 1 wedged in the lower end thereof. The ram is then lifted by the rope 15, and a charge of wet concrete poured into the tube. The ram is then lowered to rest on the concrete. The tube is then raised by upward blows of the hammer 40 till the ram, which remains stationary, is at the end of the tube; the tube is then driven down, carrying the ram with it and forcing the concrete to spread to form an enlarged footing, Fig. 12. In softer strata, the same effect may be obtained by reciprocating the tube when the ram is resting on the concrete charge, causing the ram to travel downwardly and force the concrete out of the tube. A pilot pile may be driven through the mass of concrete by means of the ram.

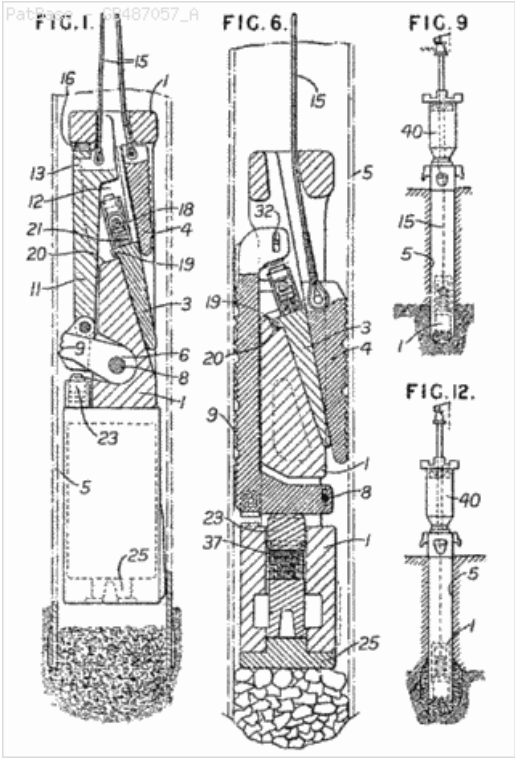
Classifications:

International (IPC 8-9): E02D5/50 E02D7/28 (Advanced/Invention);

E02D5/22 E02D7/00 (Core/Invention)

CPC: E02D5/50 E02D7/28

European: E02D5/50 E02D7/28



Family:

Publication number	Publication date	Application number	Application date
GB487057 A	19380614	GB19360034315	19361214

Priority:

GB19360034315 19361214

Probable Assignee:

BRITISH STEEL PILING CO LTD

Assignee(s): (std):

ALFRED HILEY ; BRITISH STEEL PILING CO LTD

Assignee(s):

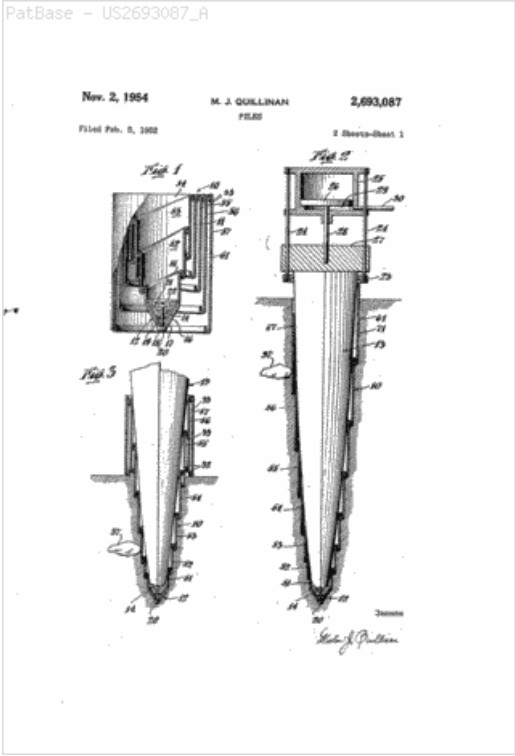
THE BRITISH STEEL PILING COMPANY LIMITED

Title: **PILE**

Abstract: Source: US2693087A (Claim 1) 1. In a **pile**, in 'co'rftbiiaioii, a -_,ile t_; a _'tri_y d coaxi_ll' 8Lbout atld conin:ecto 'at its ii iii'e'r 6xii6ftiit_ to the pi'le- tip, -eontintious con_v6lutions of said stfili boiii-g siiccbssfv6l'-_ eirciirhj_terit and di_olac6_bl_6 miffi t6 o_e ahothek, ihe I conV61iltioh _tdg_e,_s_h-g -oi6ifrom said tip in guc:cessiv_L_,laiger diaiii_t6is,'6,Wd means 'Connec ing 'f e t' h out6rii6st 'convoi_ati6n 6f 9;iid st_i_ to an inii6r adjaceiit 'c6fIV61u'ti6ii ih_i66f, _ifibi6b_s_id strip iiii_a b6 laid gii the ii6und_ and __- id,"pi'l'e Wiak -be t" __bil 'dii_,en by driving forde applibd ag_in_f s_id 11 succ'essive ii_her _conV61utions _d 'sdid _s't'ri -p -as diii_iide-d axigly, e_6h 6f'said conii_IVt'ions fWi ies_ect 't'o outer adj-ac_ent lc6iiVoliiti'o-n_ 'hs _i_ dfiveii.

Classifications:

International (IPC 8-9): E02D5/66 E02D7/30 (Advanced/Invention);
E02D5/00 E02D7/00 (Core/Invention)
International (IPC 1-7): E02D5/66 E02D7/30
CPC: E02D5/665 E02D7/30
European: E02D5/66B E02D7/30
US: 405/253 405/257



Title: DEVICES FOR INSERTING POSTS OR **PILES** INTO THE **GROUND**

Abstract: Source: US2805553A (Claim 1) 1. A device for boring wells or inserting **poles** or .posts in the **ground**, said device comprising an elongated **tube**, an annular housing coaxial with said **tube** and fixed to one end thereof, a cylindrical screw head cooperating with said **tube** adapted to be screwed into the **ground**, said screw head including an open ended cylindrical body portion with a portion thereof disposed within said housing, the edge of said portion having a series of **teeth** positioned thereon, said **teeth** forming a ratchet on said screw head, said screw head, further including a screw thread of helicoid shape on the exterior wall, a plurality of pivoted pawls secured to said **tube** within said housing, said pawls engaging said **teeth**, whereby upon rotation in one direction of said **tube** rotational movement is imparted to said screw head and said screw thread carries said head into the **ground**, all of said pawls being positioned in said housing in the same direction so that upon rotating said tube in the opposite direction the **tube** freely rotates on said screw head. 2. A device as claimed in claim 1, wherein said cylindrical body portion is axially slidable in said housing, said device further comprising an abutment disposed below each pawl and secured to said **tube** against which abutment the pawl bears when said cylindrical body portion is separated from the end of said **tube** by a given amount, whereby said pawls are disengaged from said **teeth** when said screw head penetrates the ground more rapidly than said **tube**.

Classifications:

International (IPC 8-9): E02D5/38 E02D5/56 E02D5/72 E21B10/02 E21B10/44 E21B17/07 E21B4/00 (Advanced/Invention); E02D5/00 E02D5/22 E02D5/34 E21B10/00 E21B17/02 E21B4/00 (Core/Invention)

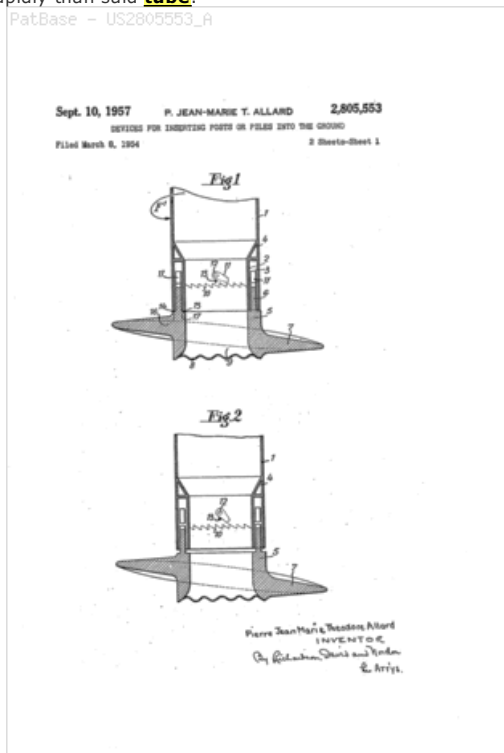
International (IPC 1-7): E02D5/38 E02D5/56 E02D5/72

CPC: E02D5/385 E02D5/56 E02D5/72 E21B4/00 E21B10/02 E21B10/44 E21B17/07

European: E02D5/38B E02D5/56 E02D5/72 E21B10/02 E21B10/44 E21B17/07 E21B4/00

US: 175/321 175/394 175/403 405/237

PatBase - US2805553_A



Family:

Publication number	Publication date	Application number	Application date
US2805553 A	19570910	US19540414854	19540308

Priority:

19530413 US19540414854 19540308

Probable Assignee: THEODORE ALLARD PIERRE JEAN MA

Assignee(s): (std): THEODORE ALLARD PIERRE JEAN MA

Inventor(s): (std): THEODORE ALLARD PIERRE JEAN MA

Inventor(s): ALLARD PIERRE JEAN MARIE THEODORE

Title: Improvements in or relating to the production of concrete foundation **piles**

Abstract: Source: GB882085A 882,085. Cast-in-situ **piles**. GRIMAUD, G. March 14, 1958 [March 14, 1957; April 10, 1957; June 4, 1957], No. 8181/58. Class 68(2). An excavating device for use in forming cast-in-situ concrete **piles** comprises a threaded preparatory **tube** and at least a **soil** removing conveyer and a concentric concrete-filling **tube** and/or a boring crown and is characterised in that the attachments are adapted to be interchangeably secured within the preparatory **tube** without removing said **tube** from a working point already reached in the **ground**. An outer **tube** T (Fig. 1) which has a thread 4 is screwed into the **ground** and has pins 17 projecting internally which engage with slots 16 in a **soil** removing **tube** C, which has **teeth** 14 and is weighted by blocks 6a and 6b which also define a central bore 12 through which water can pass. The **tube** is divided longitudinally to expedite removal of the contents. In use the **tube** is carried down by the outer **tube** T until full of **soil** and is hauled out by a cable 18 for emptying. In a modification, Fig. 5, the slots 16 are extended in length and without the curved portion. In a further modification of the **tube** C, for use in free running **soils** it is provided with an internal helical member (not shown-see Fig. 6). In place of the **tube** C a screw-type boring crown 30 (Fig. 13) can be fitted which has slots 31 to engage the pins 17 and a central **tube** through which water can be pumped. When the outer **tube** T has been sunk to the required depth the **tube** C or boring crown 30 is removed and a filling **tube** 20 (Fig. 7) is inserted and maintained concentric with the outer **tube** by rings 20b. The upper end of the filling **tube** 20 has a flange 22 which is supported on the top edge of the outer **tube** T through a layer of resilient material. A clip 25 is provided for connection of a vibrator. In use the filling **tube** is let down to a point just above water-level and the lower end is made water-tight with a concrete plug before the **tube** is lowered to its final position just above the bottom of the bore Reinforcement A comprising a base-plate 28, to which are welded longitudinal rods, is then lowered through the filling **tube** and drives out the plug. The filling **tube** and outer **tube** are then raised simultaneously as concrete is fed in through the hopper 26.

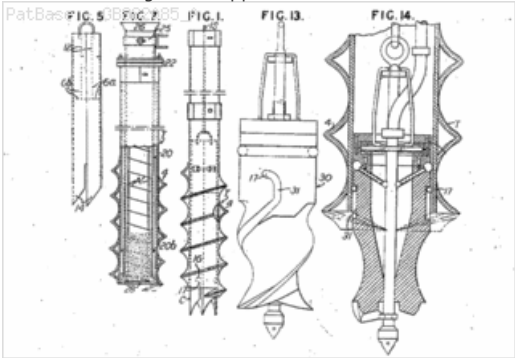
Classifications:

International (IPC 8-9): E02D5/38 E02D7/26 (Advanced/Invention);

E02D5/34 E02D7/00 (Core/Invention)

CPC: E02D5/385 E02D7/26

European: E02D5/38B E02D7/26



Family:

Publication number	Publication date	Application number	Application date
GB882085 A	19611108	GB19580008181	19580314

Priority:

19570314

Probable Assignee:

GUSTAVE GRIMAUD

Assignee(s): (std):

GUSTAVE GRIMAUD

Title: Improvements in or relating to subterranean **piles** or like underground structures

Abstract: Source: GB1092329A 1,092,329. Concrete **piles**. N. R. ANDERSON. Dec. 6, 1965 [Dec. 30, 1964], No. 51612/65. Heading E1H. Apparatus for producing a subterranean **pile** 67 from grout supplied to a hole 66 of relatively small diameter comprises a **tube** 1 to reach substantially to the desired depth of the **pile**, a bar 51 of which the portion 57 is bent so as to push into the **soil** in the side of the hole when the bar is thrust out of the bottom end of the **tube**, means for reciprocating the portion 57 of the bar into the **soil** and back into the **tube**, means for rotating the bar in the hole and means for gradually withdrawing the apparatus from the **ground**. The movement of the bar enlarges the hole and spreads the grout to form a **pile** of diameter Z for distance Y. In the embodiment shown the portion 57 of the bar 51 is a resilient rod of spring steel. The grout may include fine and coarse aggregate of small size or may contain reinforcing material such as fibre glass. Reinforcement such as pipe or steel bars may also be forced into the grout before it sets.

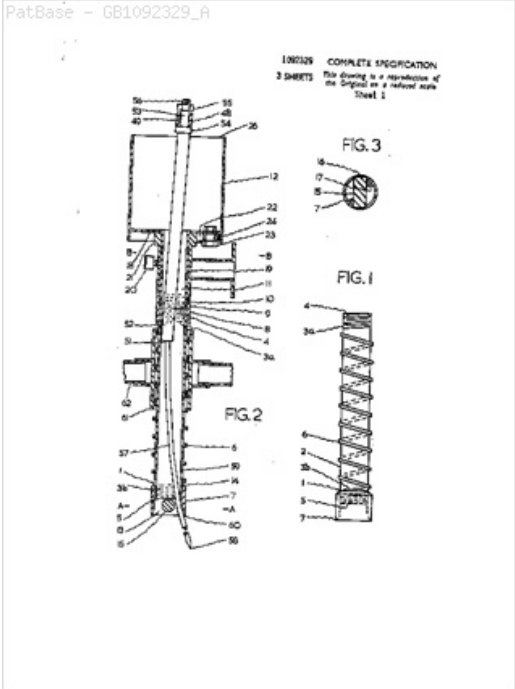
Classifications:

International (IPC 8-9): E02D5/46 (Advanced/Invention);
E02D5/34 (Core/Invention)

International (IPC 1-7): E02D5/46

CPC: E02D5/46

European: E02D5/46



Family:

Publication number	Publication date	Application number	Application date
AU5348064 A1	19670518	AU19640053480	19651115
GB1092329 A	19671122	GB19650051612	19651206

Priority:

AU19640053480 19651115

Probable Assignee: NEVILLE RUPERT ANDERSON

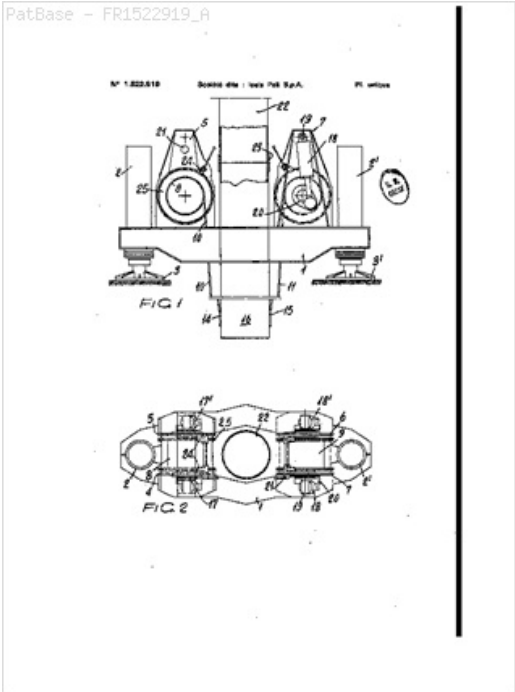
Assignee(s): (std): NEVILLE RUPERT ANDERSON

Title: DISPOSITIF DESTINE A L'EXTRACTION DE MOULES TUBULAIRES METALLIQUES PREALABLEMENTENFONCES DANS LE TERRAIN DEVICE FOR THE EXTRACTION OF METAL MOLD **TUBE** PREALABLEMENTENFONCES IN FIELD (Machine translation)

Abstract: Source: FR1522919A (Claim 1) 1. Le premier ensemble comporte deux verins hydrauliques a double effet et un bati supporte par ces verins, qui supporte le second ensemble;

Machine translation: (Claim 1) 1. The first set includes two double acting hydraulic cylinders and a frame does not support these cylinders, which supports the second set;

Classifications:
International (IPC 8-9): E02D9/02 (Advanced/Invention);
E02D9/00 (Core/Invention)
International (IPC 1-7): E02D9/02
CPC: E02D9/02
European: E02D9/02



Family:

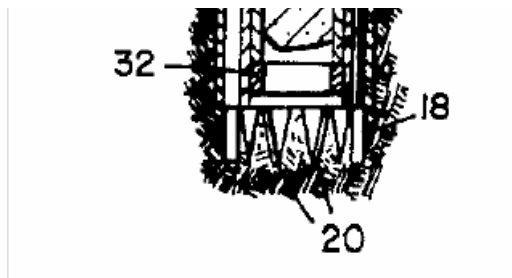
Publication number	Publication date	Application number	Application date
FR1522919 A	19680426	FR19670106428	19670516

Priority:
FR19670106428 19670516

Probable Assignee: ICELS PALI SPA

Assignee(s): (std): ICELS PALI SPA

Assignee(s): ICELS PALI S P A



Family:

Publication number	Publication date	Application number	Application date
US3921410 A	19751125	US19740486050	19740705

Priority:

US19740486050 19740705

Probable Assignee:

PHILO KENNETH W

Assignee(s): (std):

PHILO KENNETH W

Inventor(s): (std):

PHILO KENNETH W

Title: Investigation of the soundness of structures

Abstract: Source: US4128011A Method and apparatus for the investigation of the soundness of structures of various kinds are disclosed. A method which involves the transmission of a vibration wave through the structure in question and the detection of the frequency spectrum of vibration response at selected locations is disclosed as finding wide application throughout civil and structural engineering investigations. Explanation is given of the adaptation of this method to the continuous monitoring of periodic investigation of structures, with particular reference to offshore oil and gas platforms, to deteriorating concrete structures and components, and to existing bridges, tunnels and railway track systems. A number of elongate gauges for extending longitudinally of selected critical members of an offshore structure below the waterline to monitor its structural integrity and performance are also described.

Classifications:

International (IPC 8-9): E02D1/02 E02D33/00 G01M7/00

G01V1/00 (Advanced/Invention);

E02D1/00 E02D33/00 G01M7/00 G01V1/00 (Core/Invention)

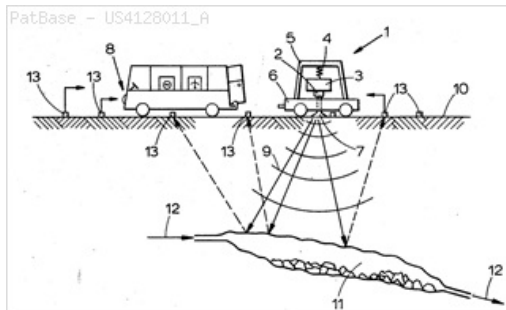
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G01N29/00 G01N29/04 G01S5/18 G01V1/14

CPC: E02D1/02 E02D33/00 G01M7/00 G01V1/00

European: E02D1/02 E02D33/00 G01M7/00 G01V1/00

US: 367/35 73/579 73/594 73/632



Family:

Publication number	Publication date	Application number	Application date
DE2531805 A1	19760401	DE19752531805	19750716
GB1521252 A	19780816	GB19740031500	19740716
US4128011 A	19781205	US19750596120	19750715

Priority:

GB19740031500 19740716

GB19740051660 19741128

GB19740053803 19741212

Probable Assignee: SAVAGE R

Assignee(s): (std): SAVAGE R ; SAVAGE ROBERT J ; SAVAGE ROBERT JOSEPH

Inventor(s): (std): SAVAGE ROBERT J ; SAVAGE ROBERT JOSEPH

Inventor(s): JOSEPH SAVAGE ROBERT