Sept. 15, 1942. J. RIISE 2,296,184

POWER PLANT FOUNDATION

Filed Aug. 7, 1939

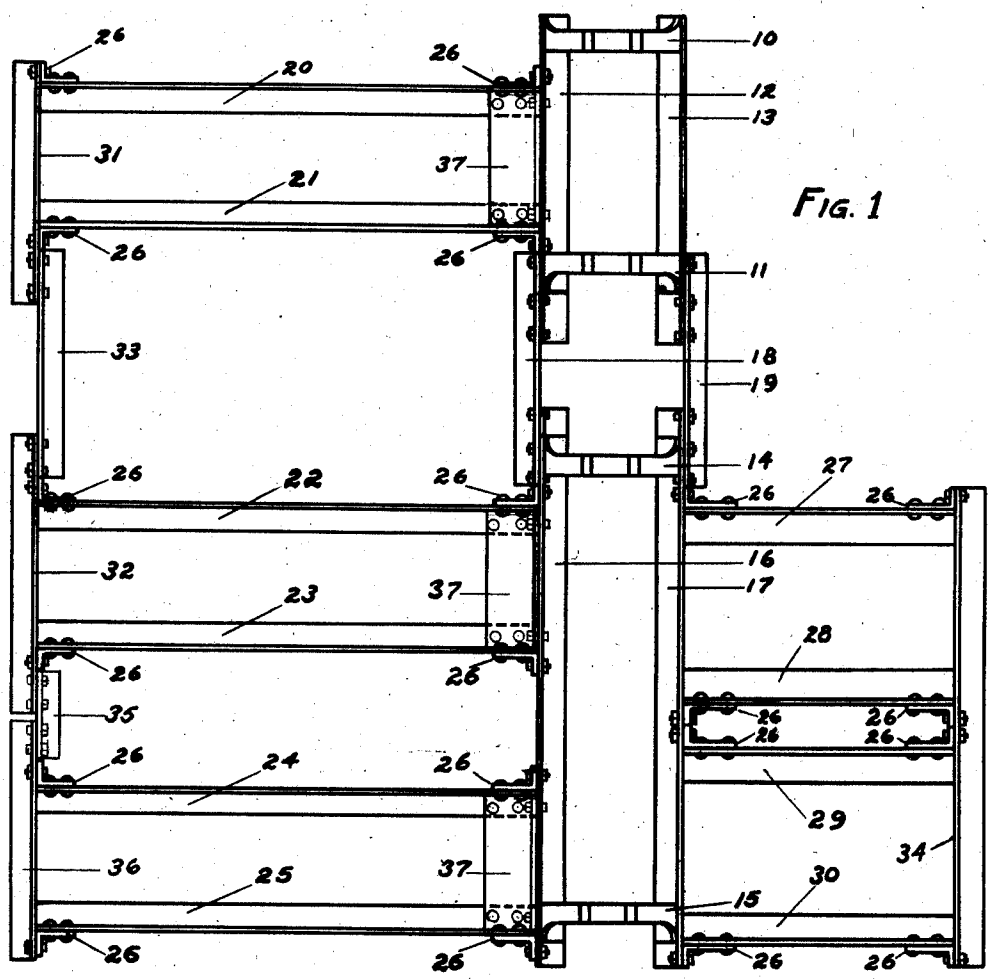



FIG. 1

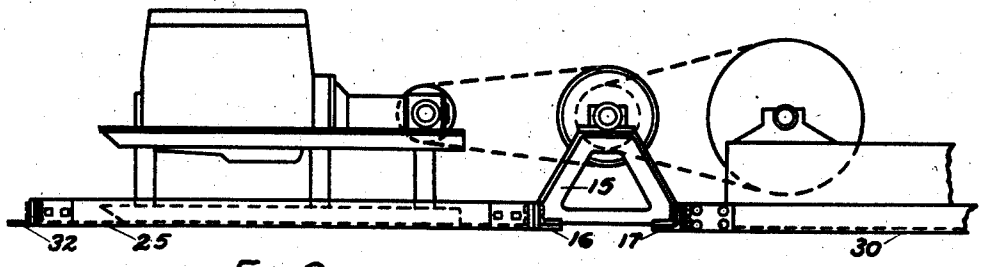



FIG. 2

JOHN RIISE - INVENTOR.

BY Stanley M Udale

ATTORNEY.

Patented Sept. 15, 1942

2,296,184

# UNITED STATES PATENT OFFICE

2,296,184

## POWER PLANT FOUNDATION

John Riise, Doylestown, Ohio

Application August 7, 1939, Serial No. 288,703

3 Claims. (Cl. 248—19)

The object of this invention is to provide a foundation or bed structure for portable power plants which is light, easily assembled or taken apart for transport and, when assembled into a unitary structure, automatically establishes the desired alinement and orientation of the power plant units, which I have found essential when engaged in deep well drilling.

It is particularly adapted for use with a jackshaft having two sections, flexibly connected, as disclosed in my patent application, Serial No. 122,541, of which application this is a continuation in part, which issued September 5, 1939, as Patent 2,171,994.

In industries, such as well drilling, where frequent removals are the rule, I have discovered that the following features are of great importance:

1. The combination of pedestal bearings for receiving jackshaft sections with structural angle base members to which the pedestals are attached to form independently transportable units and the provision of bolt holes in the angles for the attachment of base members for power and driven units in predetermined spacing and orientation.

2. The establishment and maintenance of these jackshaft bed-units in desired alinement and spaced relationship by means of connecting members detachably secured to the angles of the jackshaft bed units.

3. The provision of angle bed members detachably secured at right angles to the jackshaft bed angles to provide bed structures upon which the power units and driven units may be mounted.

4. The means for joining the ends of the angle bed members to form subassembly groups and to insure maintenance of parallelism and spacing.

5. A certain degree of flexibility permits the power plant to be placed on ground which is not absolutely level.

Fig. 1 is a plan view of a form of my invention.

Fig. 2 is an end elevation with a prime mover, a jackshaft and a driven unit indicated.

In the figures:

Jackshaft bearing pedestals 10 and 11 rest on and are attached to base angles 12 and 13 so as to form with them a unitary structure which can be treated as such, both during transportation and when being erected.

Similar bearing pedestals 14 and 15 rest upon and are attached to base angles 16 and 17. Connecting angles 18 and 19 are bolted to the bed angles 12, 13, 16 and 17 establishing alinement and spacing between the jackshaft sections.

Base angles 20, 21, 22, 23, 24 and 25 form the foundations for power units to which the angle brackets 26 are attached by riveting or by welding. Base angles 27, 28, 29 and 30 form the foundations for driven units. These base angles are arranged in pairs, in opposed relation to each other and form a bed channel upon which a unit can be slid in close approximation to its correct position.

Angles 31, 32 and 36 are attached each to its own pair of base angles and angle plates 37 are attached to the opposite ends of the base angles. These angles and plates may be welded or riveted to the base angles making each group an integral structure and facilitating assembly.

The power unit base groups are detachably secured to the jackshaft base angles by brackets 26 and angle plates 37 and, by the act of assembly, the correct spacing and alinement of the groups are secured. Spacing angles 33 and 35 detachably secured to the end angles of the power unit bases maintain the correct spacing and parallelism of the bases.

Similarly, the driven unit base angles 27, 28, 29 and 30 are attached to the opposite side of the jackshaft base and are held in correct relation by angle 34.

In assembling a power plant the jackshaft units are brought into approximate alinement and spacing and more closely adjusted by the attachment of angles 18 and 19. The power unit base groups are then attached to angles 12 and 16, correct alinement and spacing being achieved by the act of attachment. Angles 33 and 35 are then bolted in place insuring spacing and parallelism for the power unit base groups. Angles 27, 28, 29 and 30 are then bolted to angle 17 and angle 34 attached to their outer ends forming a base structure for the driven units and insuring their correct position.

With this construction, the assembly of the power plant is greatly facilitated and the units may be alined without the use of surveying instruments or tedious measurements. The parts are also light and easily handled in transportation from job to job.

When only one power plant foundation is bolted at right angles to the angle iron 16 and only one driven unit, the angle iron 16 is so short that the angle irons 16, 18, 12 and the angle irons 17, 19, 13 and the angle irons 32, 33, 31 can be made in one piece.

What I claim is:

1. In a portable and flexible power plant, two jackshaft foundation units each comprising two bearing pedestals and base members joined therewith in a unitary, portable structure, means for connecting the two structures in spaced relation, and in approximate axial alinement of all of the jackshaft bearings with each other, base members for driving units detachably connected to said jackshaft foundation units at right angles thereto.

2. In a portable and flexible power plant foundation, two parallel angle irons, two jackshaft bearings, mounted thereon, a plurality of pairs of angle irons bolted at right angles to one of the first mentioned angle irons, connecting means for holding these pairs of angle irons parallel to each other.

3. In a portable and flexible power plant foundation for a portable jackshaft, a jackshaft section, individual foundation groups maintained in parallel relationship with each other and at right angles to the jackshaft section and located on opposite sides of the said jackshaft section whereby a prime mover can be located on one side and a power absorbing unit on the other side of said jackshaft section.

JOHN RIISE.