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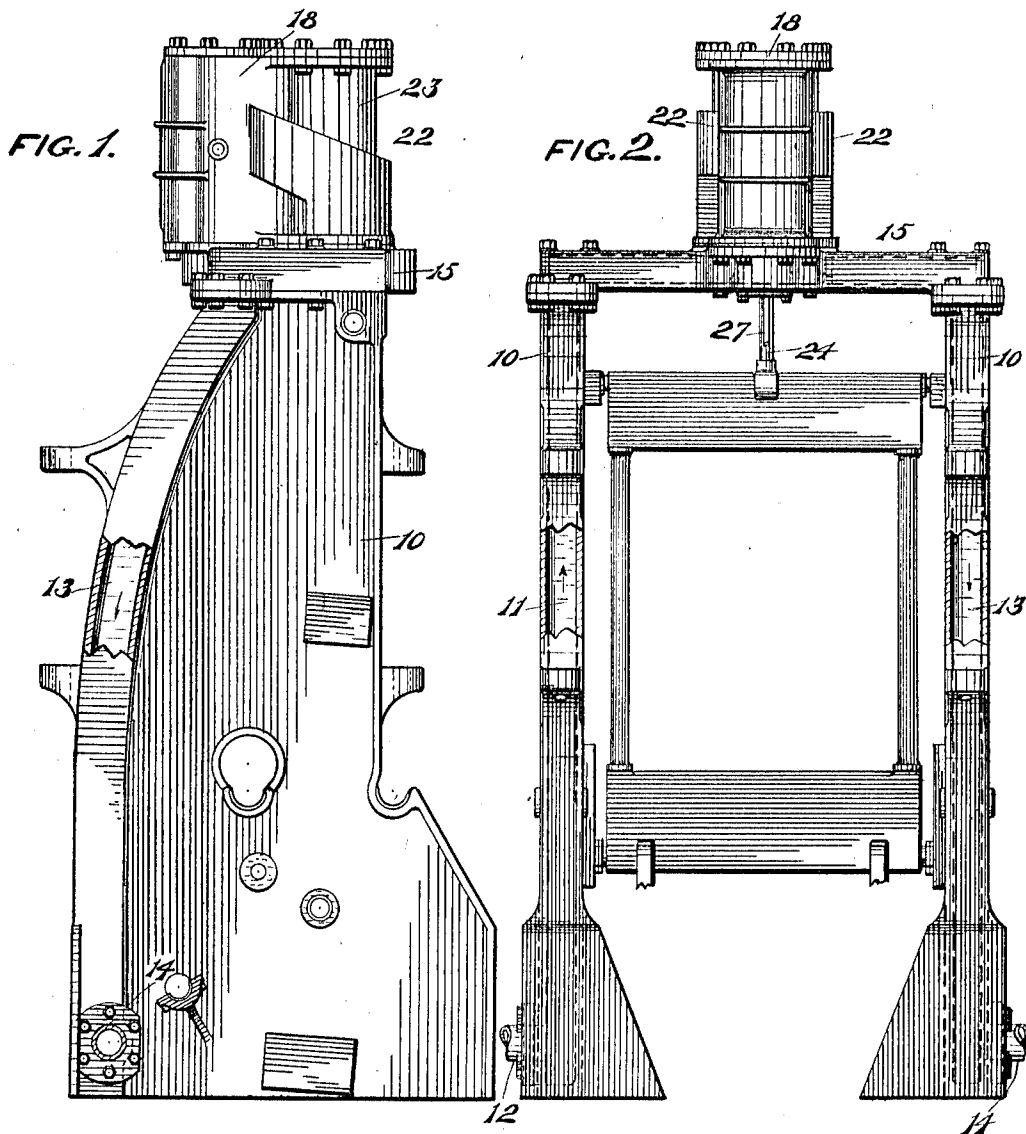
GANG SAW FRAME.

APPLICATION FILED JULY 15, 1908.

1,001,491.

Patented Aug. 22, 1911.

3 SHEETS—SHEET 1.



WITNESSES.

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Anna F. Schmidbauer

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Theodore S. Wilkin,
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3 SHEETS—SHEET 2.

FIG. 3.

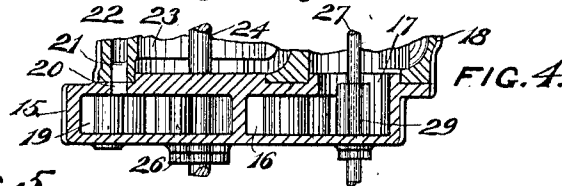
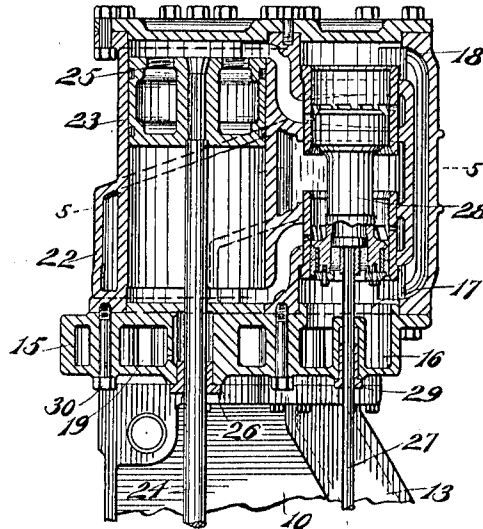
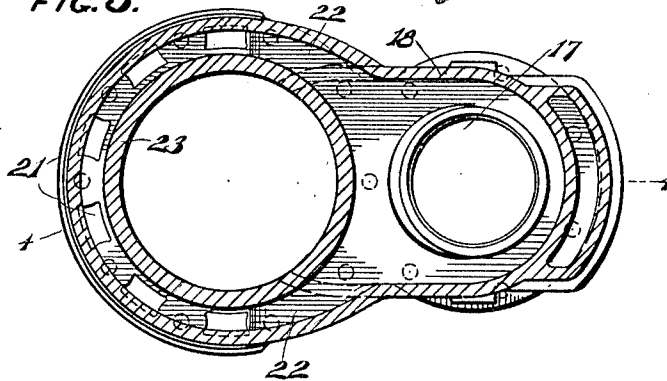


FIG. 5.



WITNESSES.

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3 SHEETS-SHEET 3.

FIG. 6.

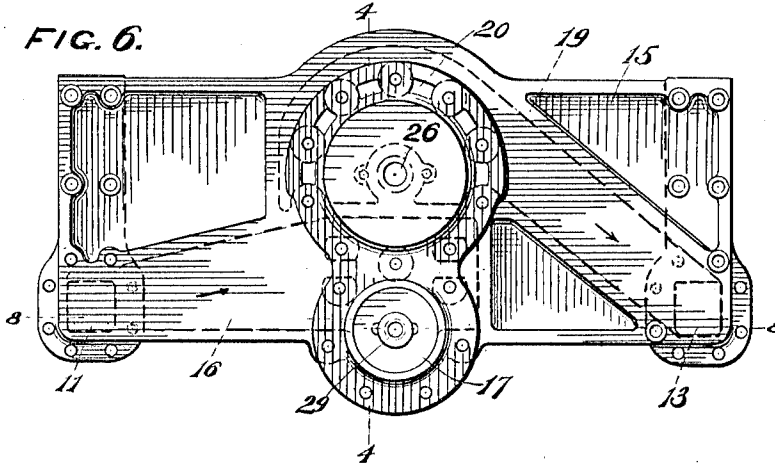


FIG. 7.

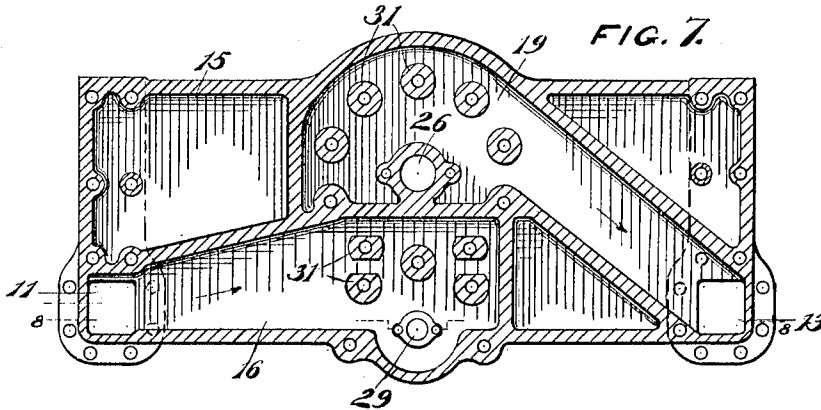
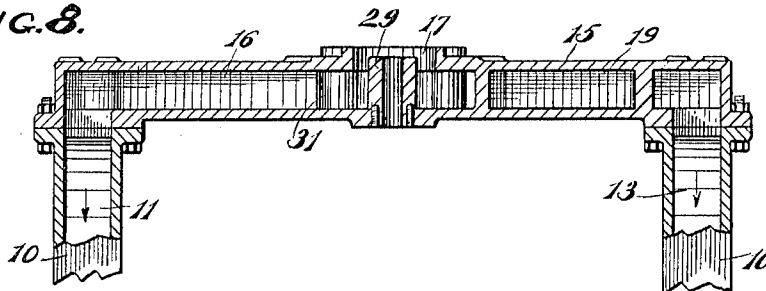


FIG. 8.



WITNESSES.

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UNITED STATES PATENT OFFICE.

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GANG-SAW FRAME.

1,001,491.

Specification of Letters Patent. Patented Aug. 22, 1911.

Application filed July 15, 1908. Serial No. 443,634.

To all whom it may concern:

Be it known that I, THEODORE S. WILKIN, residing in Oshkosh, in the county of Winnebago and State of Wisconsin, have invented new and useful Improvements in Gang-Saw Frames, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention has for its object to provide a gang saw with a frame having passageways therein leading from the base of the side frames to a headpiece connecting the upper ends of the side frames, said headpiece being provided with passageways leading from the passageways of the side frames to the live steam and exhaust chambers of the steam chest of an engine.

Another object of the invention is to improve upon details of gang saw frame constructions.

With the above and other objects in view the invention consists in the gang saw frame herein claimed, its parts and combinations of parts and all equivalents.

Referring to the accompanying drawings in which like characters of reference indicate the same parts in the several views; Figure 1 is a side elevation of a gang saw frame constructed in accordance with this invention with a portion of the conduit therein broken away for clearness of illustration; Fig. 2 is a rear elevation thereof with portions of the conduits broken away; Fig. 3 is a central sectional view through the engine and the headpiece; Fig. 4 is a sectional view of the headpiece on the plane of line 4—4 of Figs. 5 and 6; Fig. 5 is a sectional view of the engine on the plane of line 5—5 of Fig. 3; Fig. 6 is a plan view of the headpiece with the engine casing removed; Fig. 7 is a horizontal sectional view of the headpiece; and, Fig. 8 is a vertical sectional view through the headpiece taken on line 8—8 of Fig. 7.

In these drawings 10 represents the side frames which are formed with conducting passages along their rear edges extending from the bottom to the top thereof, the conducting passage of one side frame constituting a supply conduit 11 having a pipe coupling 12 near its lower end for connection with a source of steam or other fluid pressure supply and the conducting passage of the other side frame constituting an ex-

haust conduit 13 having a pipe coupling 14 near its lower end for connection with a suitable exhaust. The walls of the conduits 11 and 13 are formed integral with the side frames and form a part of the frame structure. A headpiece 15 connects the upper ends of the side frames and constitutes a shell having passageways formed therein leading to and from the engine which is mounted thereon.

The steam passageways of the headpiece are separated from each other and communicate at the corners of the headpiece with the conduits 11 and 13 of the side frames, there being connecting flanges surrounding the meeting edges of these parts which are firmly secured together to form steam tight connections, the live steam passageway 16 which communicates with the supply conduit 11 having a circular opening 17 leading to the valve chamber 18 of the engine and the exhaust steam passageway 19 which communicates with the exhaust conduit 13 having a series of openings 20 communicating with corresponding openings 21 in an exhaust steam jacket 22 surrounding the cylinder 23 of the engine and leading from the exhaust chamber. The rod 24 of the piston 25 of the engine works through a packing gland 26 in the exhaust steam passageway 19 of the headpiece and the valve rod 27 of the engine valve 28 works in a packing gland 29 in the live steam passageway of the headpiece. The engine casing forming the cylinder and the steam chest is clamped to the headpiece, preferably by bolts 30 passing through posts 31 for that purpose in the steam passages of the headpiece, and is of ordinary construction, excepting for its steam communications, the valve chamber communicating direct with the opening 17 of the headpiece and the exhaust jacket 22 passing from the exhaust chamber of the steam chest around both sides of the cylinder on an incline and communicating through the openings 21 extending around one half of the cylinder with the corresponding openings 20 in the exhaust passageway 19 of the headpiece.

The valve construction and the piston construction are of a usual type and do not enter into the present invention, which relates more particularly to the frame construction for gang saws, wherein the steam passages to and from the engine are formed

by the frame itself, the engine construction only becoming a part of the invention in so far as it is designed to cooperate with the structure of the gang saw frame, including
5 the headpiece, to render such location and construction of the passages feasible.

By means of this invention the usual pipe connections for live and exhaust steam are dispensed with, thus obviating the obstruction which they usually cause and avoiding
10 much of the steam fitting which is a constant source of trouble, owing to the parts becoming loose from the jar of the machine in operation. The steam pipe connections
15 being at the lower end of the side frames and preferably located beneath the floor enables the entire elimination of steam pipes from the mill room, a feature of structural advantage besides improving the appearance
20 of the machine and increasing the convenience in working therewith.

What I claim as my invention is:

1. A gang saw, comprising side frames having conduits formed integral therewith,
25 a headpiece mounted on the side frames and provided with passageways integral therewith registering with the conduits of the side frames, there being openings in the headpiece from the passageways, a gang
30 sash, an engine connected with the gang sash and having a casing secured to the headpiece comprising a cylinder and a steam chest having their ends closed by means of the headpiece, and passages
35 formed in the engine casing having openings communicating with the openings of the headpiece.

2. A gang saw, comprising side frames having conduits formed integral therewith,
40 a headpiece connecting the side frames and provided with passageways integral therewith communicating with the conduits of the side frames, there being openings in the

headpiece leading from the passageways thereof, a gang sash, an engine casing
45 mounted on the headpiece and comprising a cylinder and a steam chest, a piston working in the cylinder, and connected with the gang sash a valve working in the steam chest, packing glands in the headpiece sur-
50 rounding the piston rod and the valve stem respectively, and a jacket leading from the exhaust chamber of the steam chest around the cylinder and having openings leading therefrom communicating with openings
55 in the headpiece of one of the passageways thereof, the opening of the other passageway of the headpiece communicating with the interior of the steam chest.

3. A gang saw, comprising a frame, a
60 headpiece mounted on the frame and having passageways integral therewith, there being openings in the headpiece for said passageways, a gang sash, and an engine connected with the gang sash and having a casing secured to the headpiece and provided with openings registering with the
65 openings of the headpiece.

4. A gang saw, comprising a frame, a
70 headpiece mounted on the frame and provided with passageways integral therewith, there being openings in the headpiece from the passageways, a gang sash, an engine connected with the gang sash and having a casing secured to the headpiece comprising
75 a cylinder and a steam chest having their ends closed by means of the headpiece, and passages formed in the casing having openings communicating with the openings of
80 the headpiece.

In testimony whereof, I affix my signature, in presence of two witnesses.

THEODORE S. WILKIN.

Witnesses:

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ANNA F. SCHMIDTBAUER.