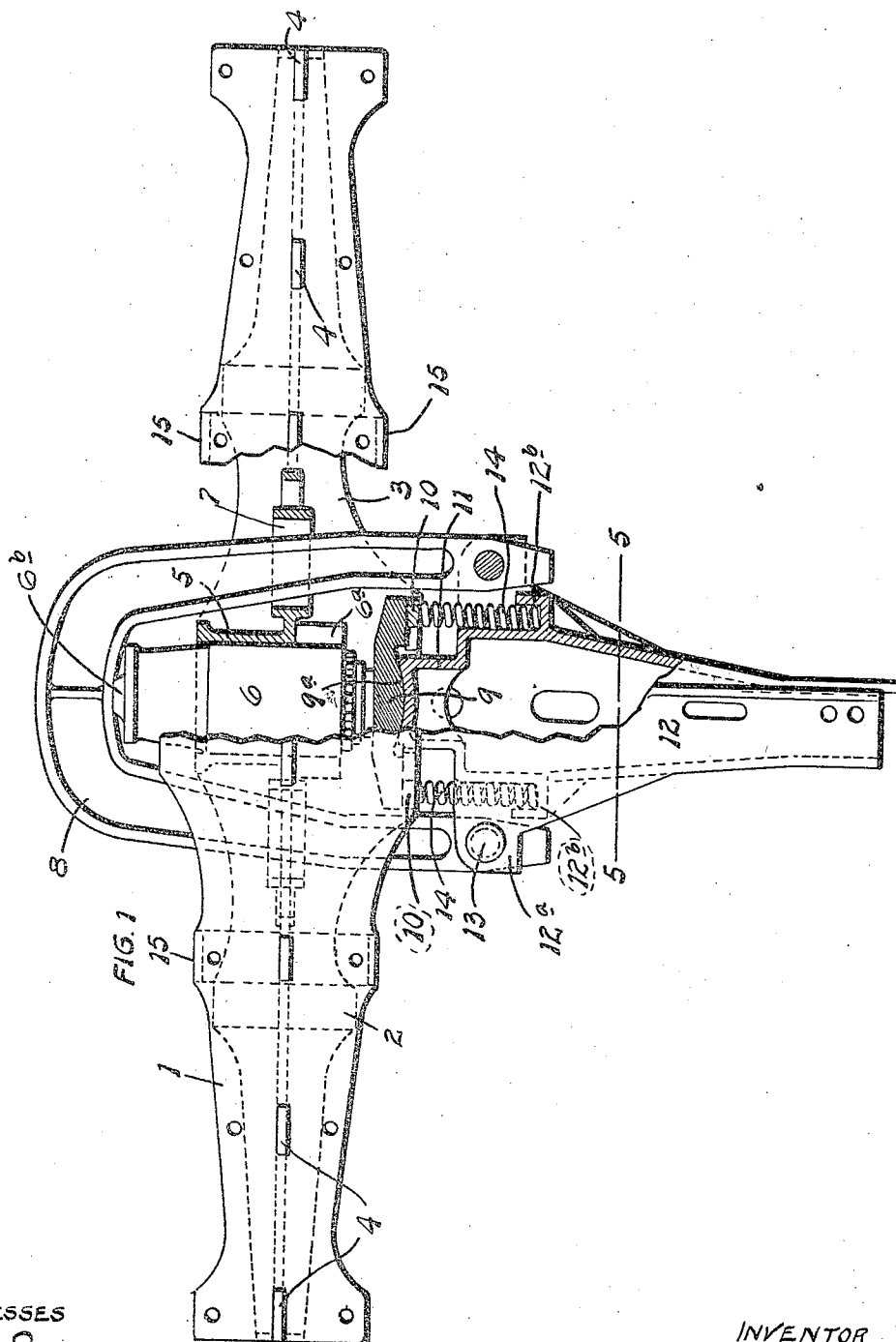


1,065,625.

2 SHEETS--SHEET 1.



Yours
W. P. Smith

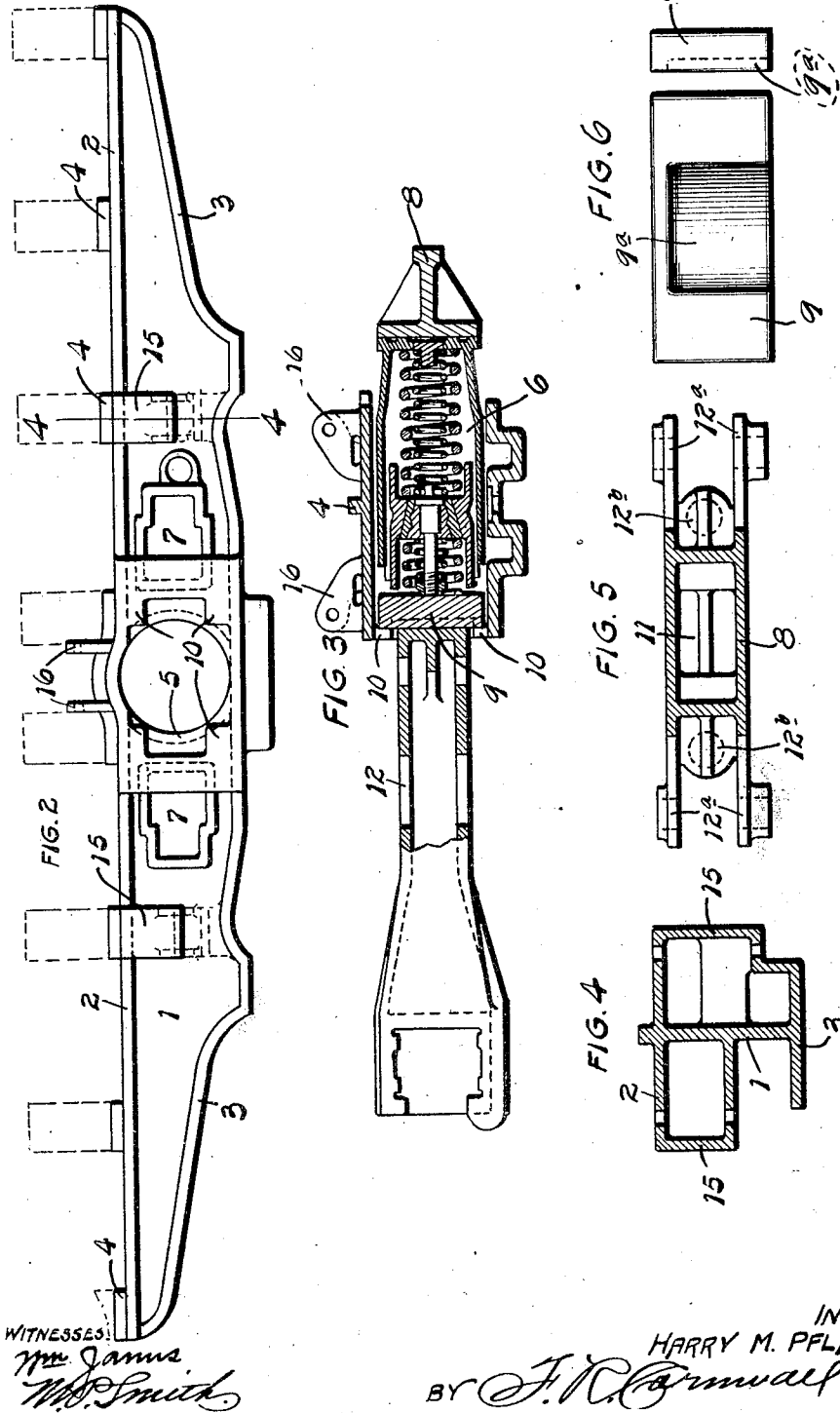
INVENTOR
HARRY M. PFLAGER
BY *J. R. Cornwall* ATT'Y.

H. M. PFLAGER.
TRANSOM DRAFT GEAR.
APPLICATION FILED SEPT. 28, 1911.

Patented June 24, 1913.

2 SHEETS-SHEET 2.

1,065,625



WITNESSES:
Mr. James
Mr. Smith

INVENTOR
HARRY M. PFLAGER
BY *F. R. Cornwall* ATT'Y.

UNITED STATES PATENT OFFICE.

HARRY M. PFLAGER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO TRANSOM DRAFT GEAR COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF DELAWARE.

TRANSOM DRAFT-GEAR.

1,065,625.

Specification of Letters Patent.

Patented June 24, 1913.

Application filed September 28, 1911. Serial No. 651,803.

To all whom it may concern:

Be it known that I, HARRY M. PFLAGER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Transom Draft-Gears, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view, partly in the horizontal section of my improved transom draft gear. Fig. 2 is a front elevational view of the bolster. Fig. 3 is a vertical sectional view through the gear. Fig. 4 is a cross sectional view on line 4—4 Fig. 2. Fig. 5 is a sectional view through the line 5—5 Fig. 1. Fig. 6 is a combined view showing front and side elevations of the follower plate.

This invention relates to a new and useful improvement in transom draft gears, designed particularly for use in connection with friction draft springs, such, for instance, as the well known Westinghouse type.

In the drawings: 1 indicates the bolster, which is preferably of cast metal, having a top flange 2 and a bottom flange 3, the latter having integral or removable center and side bearings as desired. The top flange 2 is provided at points in alinement with the center, side and intermediate sills, with vertical projecting lugs 4. These lugs are designed to enter recesses in the under faces of said sills, to interlock the bolster therewith.

The vertical web of the bolster is provided at its center with a rearwardly extending hollow boss 5, in which is mounted a spring cylinder 6 of the friction draft gear. On each side of this hollow boss are flanged openings 7 for the passage of a transom yoke 8. The spring cylinder 6 has lugs 6^a arranged on each side thereof to bear against the front face of the bolster web.

The rear end of the spring cylinder is rounded as at 6^b, to engage the convex face

of the yoke and bear thereagainst, while the front ends of the draft springs bear against a follower plate 9, said follower plate being arranged behind stop shoulders 10 extending from the forward edges of the top and bottom flanges of the bolster. In the front face of this follower plate is a recess, whose bottom wall is convex, as shown at 9^a Fig. 6, and against this convex face a concave rearwardly extending lug 11 on the transom draw bar, bears, as shown in Fig. 1.

The transom draw bar 12 has laterally extending lugs 12^a, between which are received the forward ends of yoke 8, said yoke being connected with the draw bar by means of bolts 13. 12^b indicates spring seats against which centering springs 14 bear at their forward ends, the rear ends of said springs bearing against the vertical front wall of the bolster, forming a reinforcing continuation of the lug shoulders 10.

By the above construction, the yoke and its carried draw bar are permitted to swing about the ends of the spring cylinder, in order that the coupler may move laterally in rounding curves, the concave cross bar of the yoke at the rear, and the convex face 9^a on the follower plate, readily permitting such lateral movement. When the draw bar 12 is relieved of strain, as when the cars are uncoupled, the springs 14 exert their energies to restore the parts to normal or central position, so that the coupler carried by the draw bar 12 will be located centrally with respect to the carry iron.

In order to avoid recessing the sub-sills to accommodate the top flanges on the bolster, I provide vertically abutting faces 15 at the edges of the top flanges, as shown in Fig. 4.

As it would be inconvenient to arrange vertical bolts to secure the center sills in position, I provide the top flange of the bolster with projections 16 formed with bolt holes, which projections provide abutments for the attachment of the center sills.

What I claim is—

1. In a transom draft gear, the combination of a bolster having a cylindrical boss

for the reception of a spring cylinder, openings on each side of said boss for the passage of the yoke, and a transom draft gear comprising a draw bar yoke, draft springs and friction members, which draw bar yoke and draw bars are connected to the friction members so as to swing horizontally relative thereto.

2. In a transom draft gear, the combination of a bolster having a cylindrical boss at its center, lugs in advance of said boss, a follower plate bearing against said lugs, a spring cylinder having lugs bearing against the bolster, said spring cylinder extending through said cylindrical boss, a yoke passing through openings in the bolster and engaging the rear end of said spring cylinder, and a draw bar to which the forward ends of said yoke are connected, said draw bar bearing against said follower plate, and which yoke and draw bar are mounted to swing horizontally with respect to the bolster and spring cylinder.

3. In a transom draft gear, the combination of a bolster, a spring cylinder slidably mounted therein, a follower plate, a yoke engaging the rear end of said spring cylinder and adapted to swing horizontally relative thereto, a draw bar connected to the forward ends of said yoke and engaging said follower plate, and center springs arranged on each side of said draw bar and bearing against said bolster.

4. In a transom draft gear, the combination with a bolster, of a yoke, the legs of which extend through openings in the web of the bolster, a draw bar connected to said yoke, a friction spring cylinder positioned in the bolster and bearing against the rear portion of the yoke, a follower plate between the friction spring cylinder and the rear end of the draw bar carried by the yoke, which yoke and draw bar are adapted to swing horizontally relative to the bolster and friction spring cylinder, and centering springs between the draw bar and the bolster.

5. In a transom draft gear, the combination with a bolster having a centrally disposed cylindrical boss and having openings through its vertical web to the sides of said boss, of a spring cylinder positioned in the cylindrical boss, a draw bar yoke, the legs of which extend through the openings to the sides of the cylindrical boss, the inner rear face of which yoke is curved and bears against the rear end of the spring housing, a draw bar connected to the forward ends of the yoke, and a follower plate in front of the spring cylinder, which follower plate is provided with a curved bearing face against which the rear end of the draw bar engages.

6. In a transom draft gear, the combination with a bolster, of a draw bar carrying yoke, the legs of which pass through open-

ings in the bolster, said yoke being free to swing horizontally with respect to said bolster, a separate friction spring cylinder mounted in the bolster between the rear portion of the yoke and the rear portion of the draw bar carried thereby, a bearing member between the spring cylinder and the rear end of the draw bar, and yielding pressure means between the rear portion of the draw bar and the bolster for normally centering the yoke and its carried draw bar with respect to the spring cylinder.

7. In a transom draft gear, the combination with a bolster, of a draw bar carrying yoke, the legs of which pass through openings in the bolster, said yoke being free to swing horizontally with respect to said bolster, a separate friction spring cylinder mounted in the bolster between the rear portion of the yoke and the rear portion of the draw bar carried thereby, and springs for normally holding the yoke in a central position with respect to the spring cylinder and bolster.

8. In a transom draft gear, a bolster, a spring cylinder carried thereby, a horizontally swinging yoke passing through openings formed in the bolster and bearing against the spring cylinder, a follower plate in front of the spring cylinder, which follower plate is provided with a curved bearing face, means on the bolster for holding the follower plate in position in front of the spring cylinder, a draw bar extension carried by the forward ends of the yoke, the rear end of which draw bar extension is provided with a curved bearing face that engages the bearing face on the follower plate, and springs between the bolster and draw bar extension for centering the same and the yoke with respect to the spring cylinder and bolster.

9. In a transom draft gear, the combination with a bolster provided with openings, of a yoke the legs of which pass through the openings in the bolster, said yoke being free to swing horizontally with respect to said bolster, a draw bar extension connected to the forward end of the yoke, means positioned in the bolster between the rear end of the draw bar extension and the rear end of the yoke for yieldingly resisting lengthwise movement of said draw bar extension and yoke, and centering springs arranged between the rear portion of the draw bar extension and the bolster for centering the draw bar extension and the yoke with respect to the bolster and spring cylinder.

10. In a transom draft gear, the combination with a bolster, of a spring cylinder loosely mounted in the central portion of said bolster, a follower plate in front of the spring cylinder, and a draft gear comprising a yoke and a draw bar carried thereby, the rear portion of which yoke is provided

with a curved bearing surface that engages
the rear end of the spring cylinder and the
rear end of which draw bar bears against a
curved surface on the follower plate where-
5 by said draft gear is permitted to swing
horizontally with respect to the spring cylin-
der and follower plate.

In testimony whereof I hereunto affix my
signature in the presence of two witnesses,
this 14th day of September, 1911.

H. M. PFLAGER.

Witnesses:

M. P. SMITH,

HAL C. BELLVILLE.