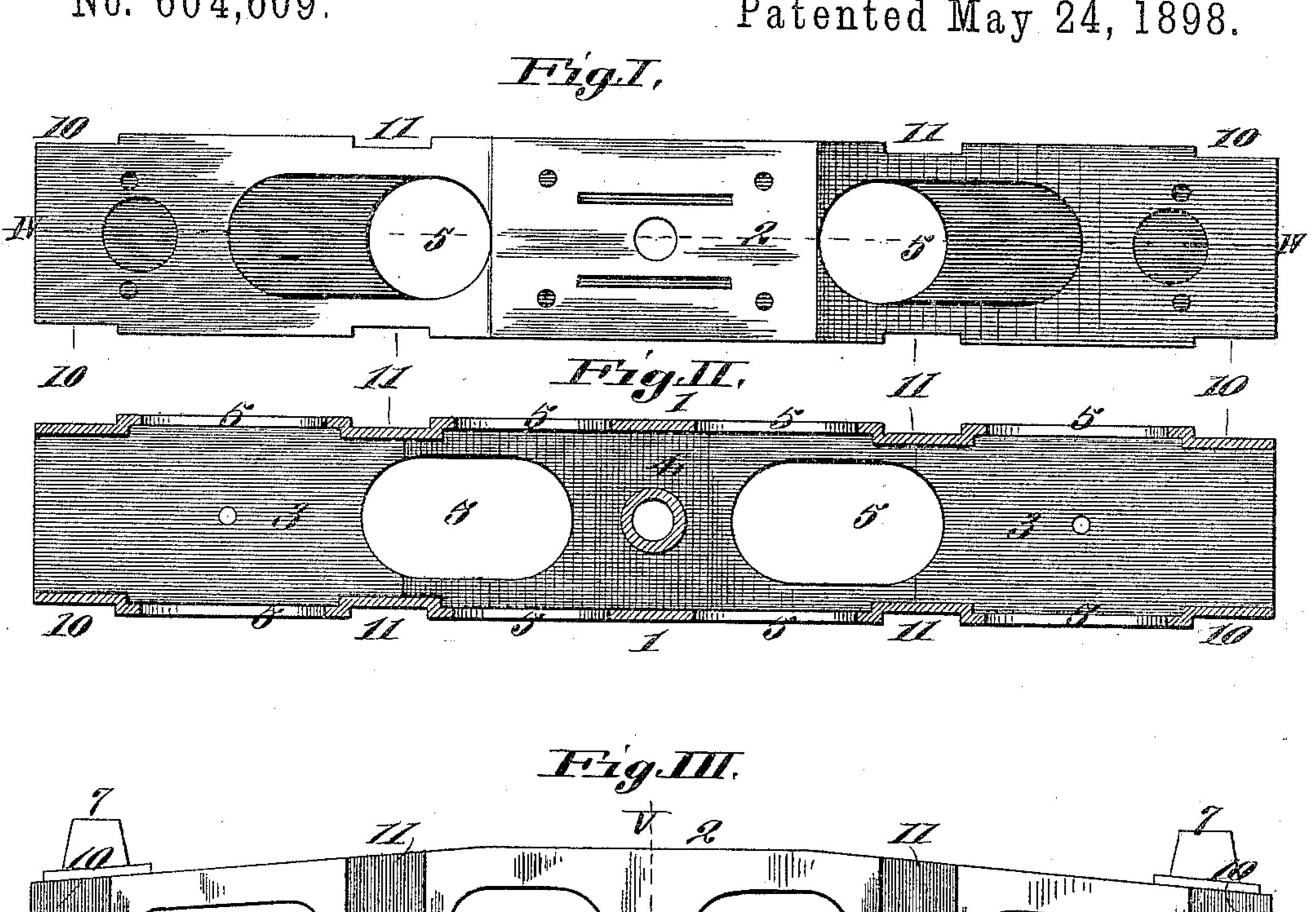
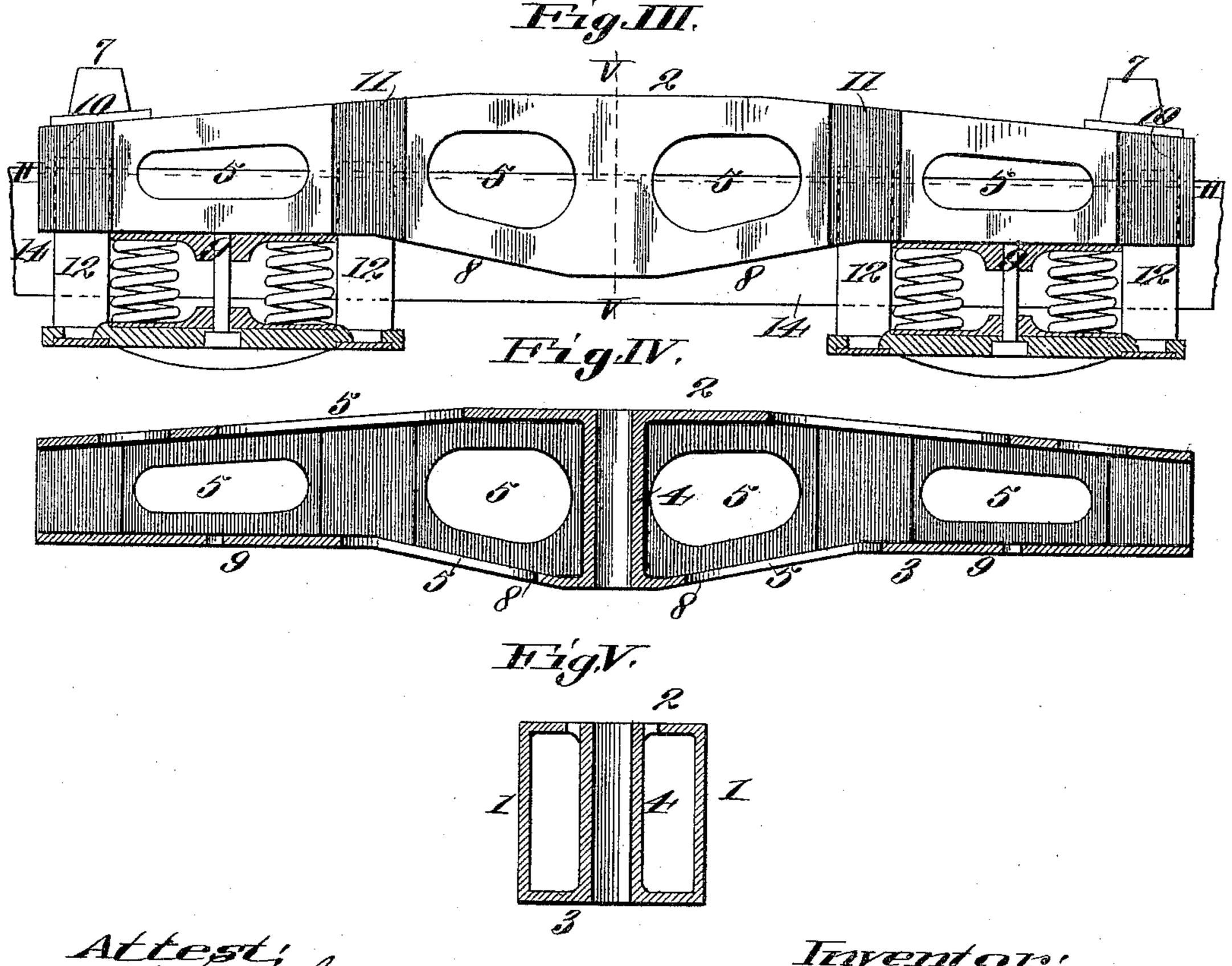
## T. M. GALLAGHER. CAR BOLSTER.

No. 604,609.

Patented May 24, 1898.





Triverstor; Thomas M. Gallaghen,

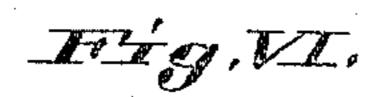
(No Model.)

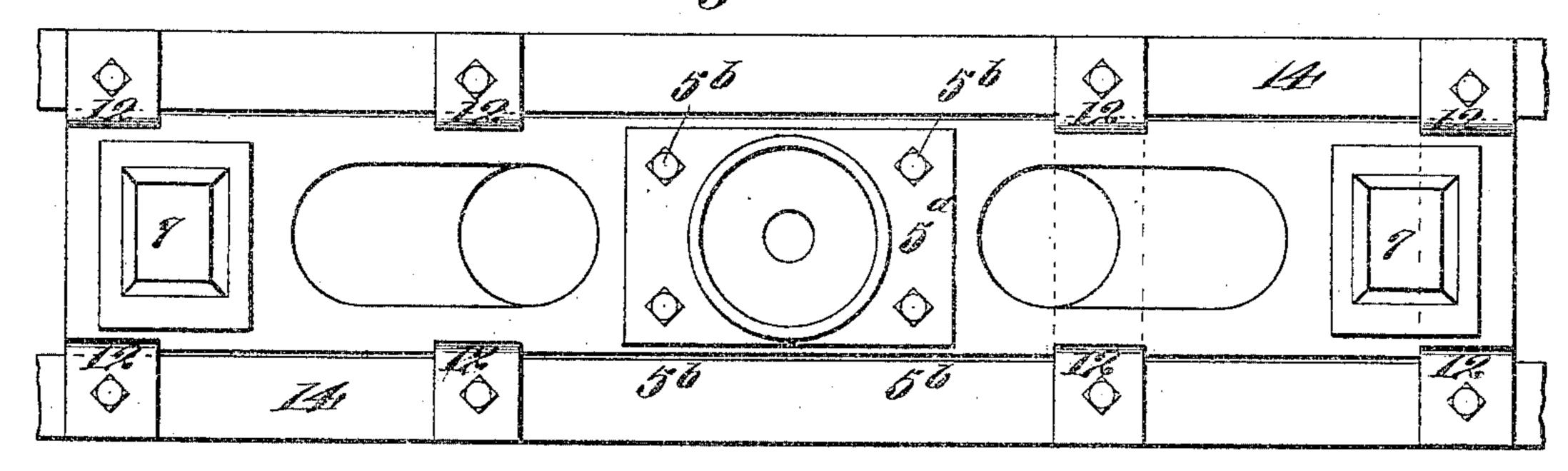
2 Sheets—Sheet 2.

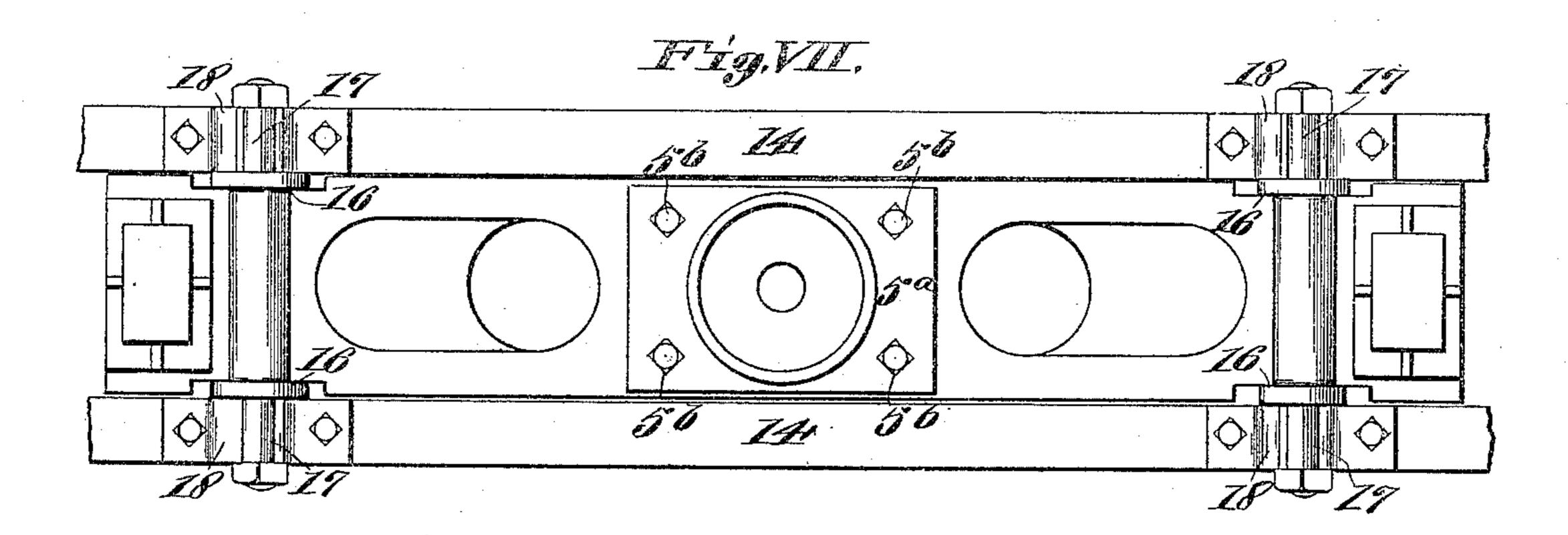
## T. M. GALLAGHER. CAR BOLSTER.

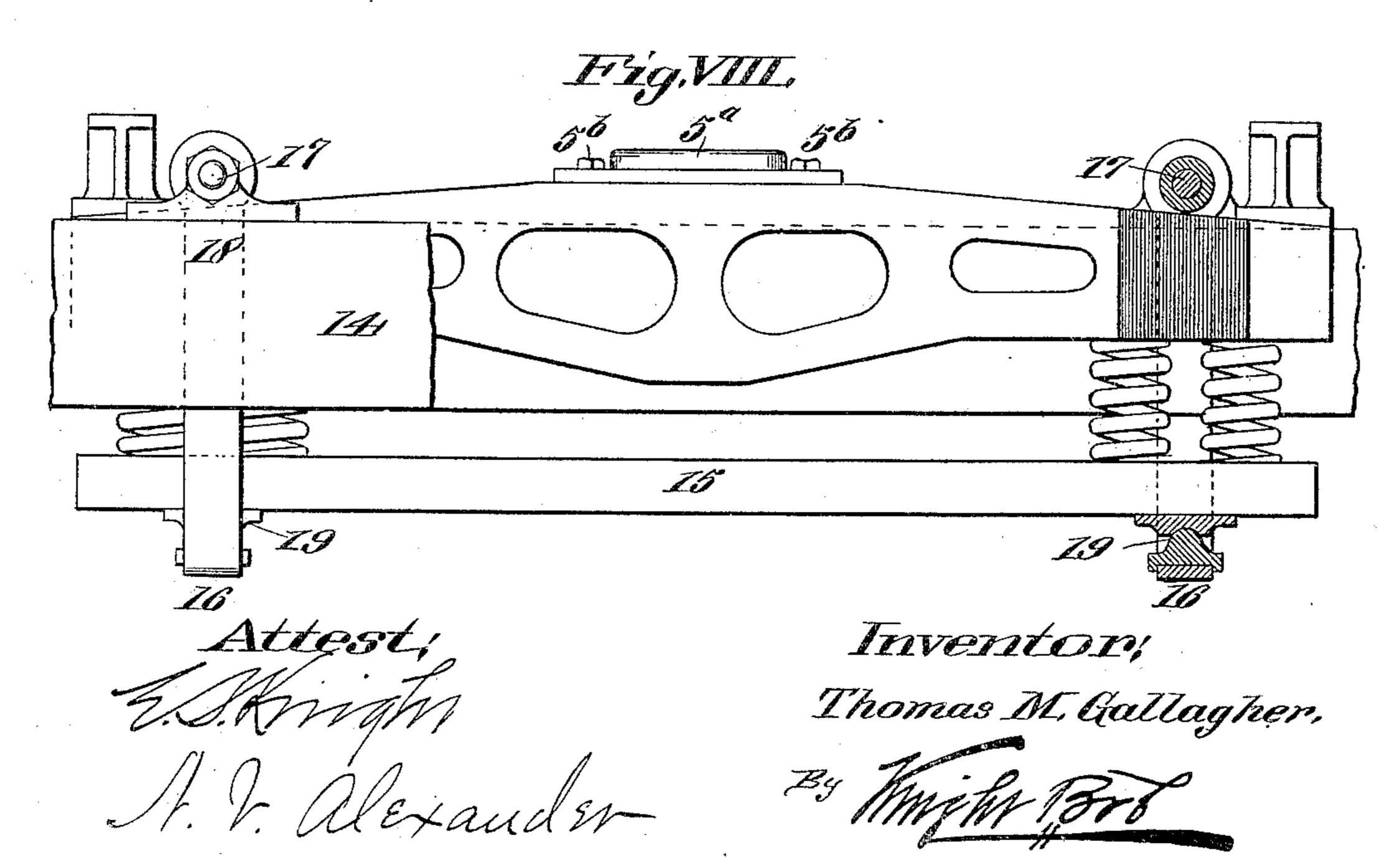
No. 604,609.

Patented May 24, 1898.









## United States Patent Office.

THOMAS M. GALLAGHER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE SHICKLE, HARRISON & HOWARD IRON COMPANY.

## CAR-BOLSTER.

SPECIFICATION forming part of Letters Patent No. 604,609, dated May 24, 1898.

Application filed January 3, 1898. Serial No. 665,454. (No model.)

To all whom it may concern:

Beitknown that I, THOMAS M. GALLAGHER, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have 5 invented a certain new and useful Improvement in Car-Bolsters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to an improved form of bolster for railway-cars, my object being to construct such a bolster in a manner that it will be neat in appearance and have ample strength with a minimum weight.

My invention consists in features of novelty hereinafter fully described, and pointed

out in the claims. Figure I is a top or plan view of my improved bolster with the center plate and side | 20 bearings removed. Fig. II is a horizontal longitudinal section of the bolster, taken on line II II, Fig. III. Fig. III is a side view. Fig. IV is a vertical longitudinal section taken on line IV IV, Fig. I. Fig. V is a verti-25 cal transverse section of the bolster, taken on line V V, Fig. III. Fig. VI is a top view showing the bolster complete and illustrating the manner in which it is suspended. Fig. VII is a top view, and Fig. VIII a side view 30 showing the bolster arranged so as to swing in its support.

The bolster is made in hollow box form, having sides 1, a top 2, and a bottom 3, all cast integral, preferably of steel, with a central 35 hollow hub or sleeve 4 to receive the kingbolt.

To lighten up the bolster, I form the top, bottom, and sides with openings or cut-away portions 5.

The top of the bolster has a central flat portion, as shown in the drawings, to receive the center plate 5a, the plate being secured to the | top of the bolster by bolts 5<sup>b</sup>. From the central flat portion the top of the bolster slopes 45 downward toward each end, as illustrated in Fig. III, and near each end it is provided with a side bearing 7.

The bottom of the bolster is formed with sloping portions 8, from which extend horizon-50 tal portions 9, as shown in Fig. III, that form

the bolster it has the requisite strength, while its weight is reduced to a minimum for the strength required.

The sides of the bolster are formed with 55 outer grooves or recesses 10 and inner grooves or recesses 11 to receive the hangers 12, (in the form of U-shaped straps,) that support the spring-seats 13, the upper ends of the hangers being secured to cross-pieces 14, con- 60 nected, as usual, to the sides of the truckframe. (Not shown.)

In Figs. VII and VIII, I have shown the bolster-springs resting on a single seat-strip 15, supported from the cross-pieces 14 by U- 65 shaped straps 16 and rods 17, the rods passing through the ends of the straps and resting on boxes 18, secured to the cross-pieces 14. Ball-and-socket bearings 19 are located between the straps and the seat-strip. With 70 this arrangement there is required but a single groove in each side at each end of the bolster, and these grooves are made somewhat wider than the supporting-straps, so as to permit the bolster to swing.

By making the bolster rectangular in form in transverse section, or, as is stated, of box form with the sides flush with the top and bottom, so that the top, sides, and bottom do not overhang each other, it retains all the 80 advantages of the old style of rectangular wooden bolster, while casting the bolster in metal and making it hollow it is stronger, more durable, and presents a better appearance.

I claim as my invention—

1. A metallic bolster for railway-cars made in hollow box form with a top, sides and bottom, all made integral, the top being shaped to receive the center plate and side bear- 90 ings, and the bottom being extended out and adapted to provide spring-seats, substantially as set forth.

2. A metallic bolster for railway-cars made in hollow box form with a top, sides and bot- 95 tom all made integral, the top having a horizontal central part and sloping ends, and the bottom having sloping central portions and horizontal ends providing spring-seats, substantially as set forth.

3. A metallic bolster for railway-cars made flat bearings for the springs. By thus sloping | in hollow box form with a top, sides and bot-

100

tom all made integral, the sides being formed with grooves to receive hangers, and the bottom being extended out to provide springseats, substantially as set forth.

4. A metallic bolster for railway-cars made in hollow box form with a top, sides and bottom, formed flush with each other, all made

integral, and the bottom being extended out to provide spring-seats, substantially as set forth.

THOMAS M. GALLAGHER.

In presence of—

E. S. KNIGHT,

N. V. ALEXANDER.