

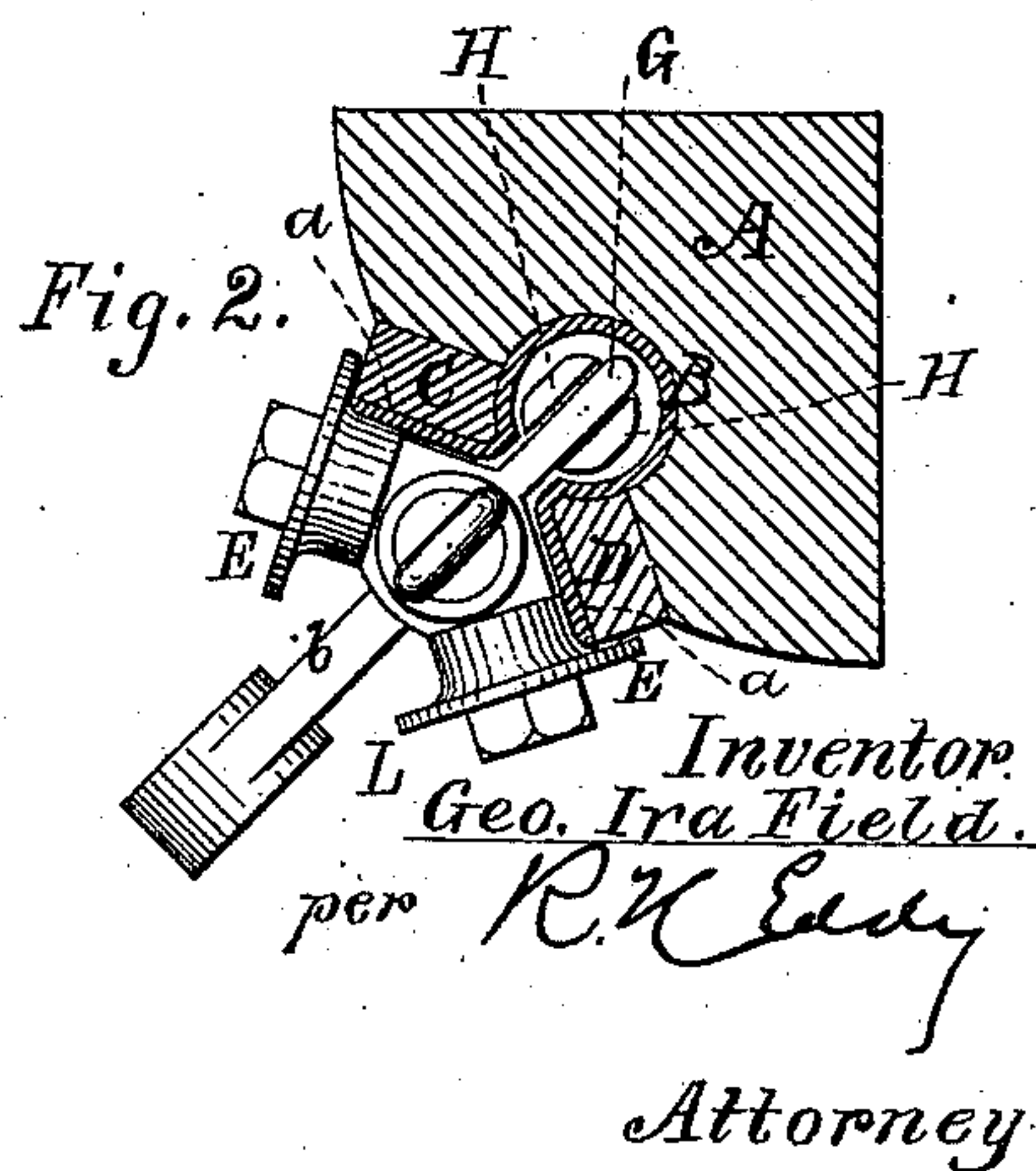
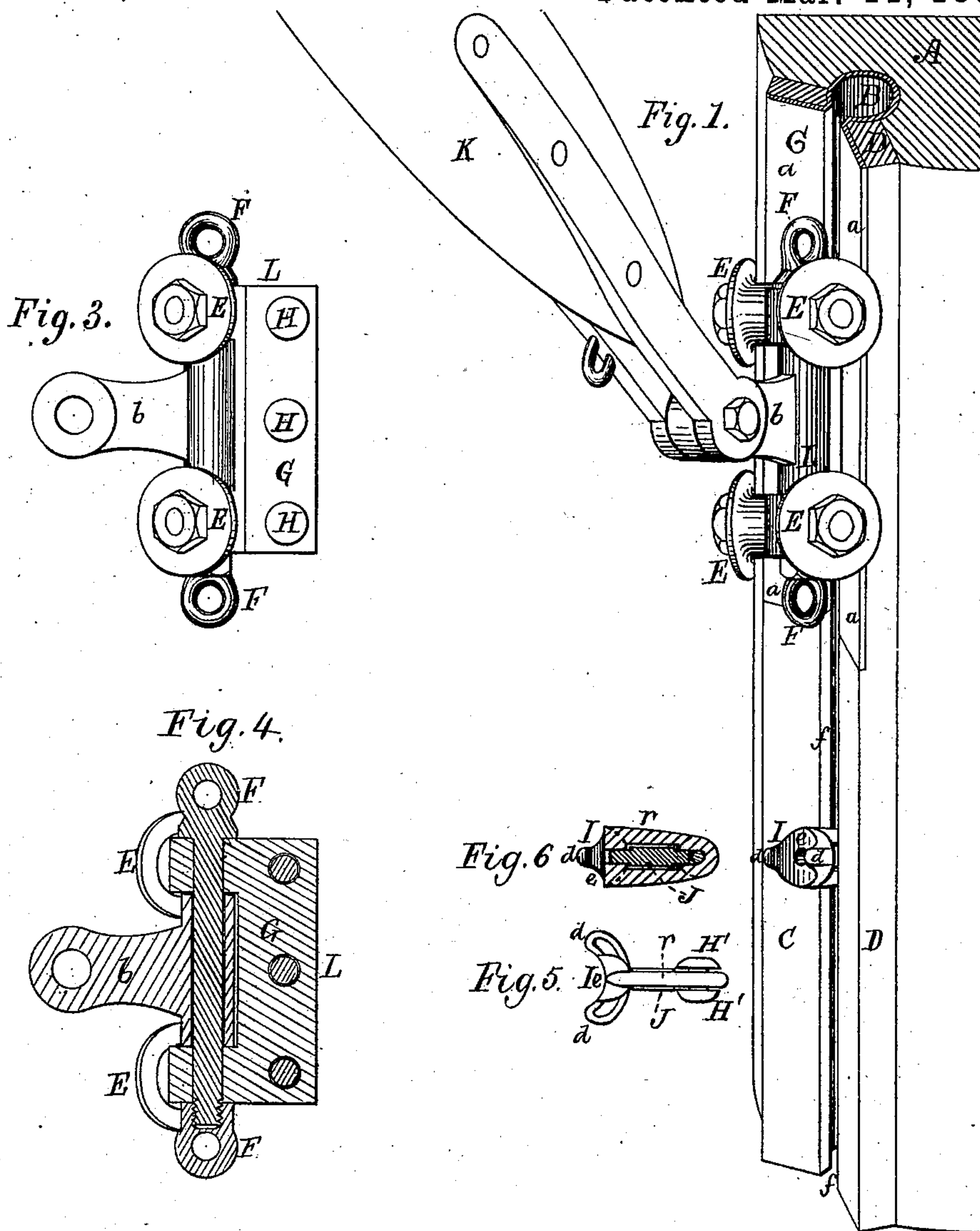
(No Model.)

G. I. FIELD.

GAFF SUPPORT FOR VESSELS.

No. 294,980.

Patented Mar. 11, 1884.



Witnesses:

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GEORGE IRA FIELD, OF FALL RIVER, MASSACHUSETTS.

GAFF-SUPPORT FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 294,980, dated March 11, 1884.

Application filed December 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE IRA FIELD, of Fall River, in the county of Bristol, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Gaff-Supports of Navigable Vessels; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a perspective view, and Fig. 2 a transverse section, of portions of a mast and a gaff provided with my invention, the nature of which is defined in the claim hereinafter presented. Fig. 3 is a side elevation, and Fig. 4 a vertical section, of the gaff-supporting carriage. Fig. 5 is a top view, and Fig. 6 a vertical and longitudinal section, of the sail luff-runner, to be described.

In such drawings, A denotes part of a mast, it having within it a metallic tube, B, arranged and operated between two bearing-rails, C D, which incline laterally at an obtuse angle to each other, as represented. The tube and the metallic caps *a a* of the rail are shown in Figs. 1 and 2 as formed of plate metal, and in one piece. They extend upward relatively to the mast in manner as shown. In some cases the mast, in place of the tube, may be provided with a groove, circular or otherwise properly formed in its transverse section, such groove being open between the two inclined rails, in manner as represented in Figs. 1 and 2, and such rails being either with or without caps. I prefer, however, to have the metallic tube and caps, as shown.

The gaff, whose foot is indicated at K in Fig. 1, is pivoted, as therein represented, to an arm, *b*, of a carriage, L, such arm being likewise pivoted to the carriage, so as to be capable of swinging or turning horizontally, or about so, in the arc of a circle. This carriage has four flanged wheels, E, applied to it and arranged as shown, each wheel being free to revolve on a suitable journal, and to bear against one of the rails C D, the disposition of the wheels and their flanges with the said rails being as represented in Figs. 1 and 2. The carriage at its upper end, as well as at its

lower end, has an eye, F, projecting from it, the upper of the said eyes being for the attachment to the carriage of a rope for raising it and the gaff relatively to the mast. The lower eye is for aiding in securing the fore upper corner of the sail to the carriage. The said carriage has a wide flange, G, to extend back from it into the bore of the tube B, there being journaled to the said flange, on opposite sides of it, a series of friction-rollers, H, to run against the inner surface of the tube, and keep the carriage and its wheels in their due relations with the mast A and the two rails C D.

The sail below its connection with the carriage is to have fixed to its luff a series of runners, one of which is shown in Figs. 1, 5, and 6. The body *r* of this runner, concave on its front, as shown at *e*, to receive and span the luff of the sail, has two eyes, *d d*, extending from it, as shown, for reception of a seizing for fastening the luff to such runner. Furthermore, the runner extends within the tube B, and is not only provided on its opposite sides with friction-rollers H' to hold it in the groove, but has another friction-roller, J, arranged in it, as shown, this latter roller being to bear against either of the sides of the port or opening *f* of the tube while the runner may be moving with the sail.

While the gaff may be in the act of being hoisted or lowered its sustaining-wheel carriage will move with it and run against the rails, it being kept in contact with them by the flange G, its rollers H, and the tube B.

I claim—

The gaff-supporting carriage provided with the flanged wheels, the swinging arm, and the flange and its friction-rollers, essentially as described, in combination with the mast having the bearing-rails and the open tube or groove, as explained, all being adapted and arranged substantially and to operate as set forth.

GEORGE IRA FIELD.

Witnesses:

VALOROUS O. SAYWARD,
JOSEPH MCALPINE.