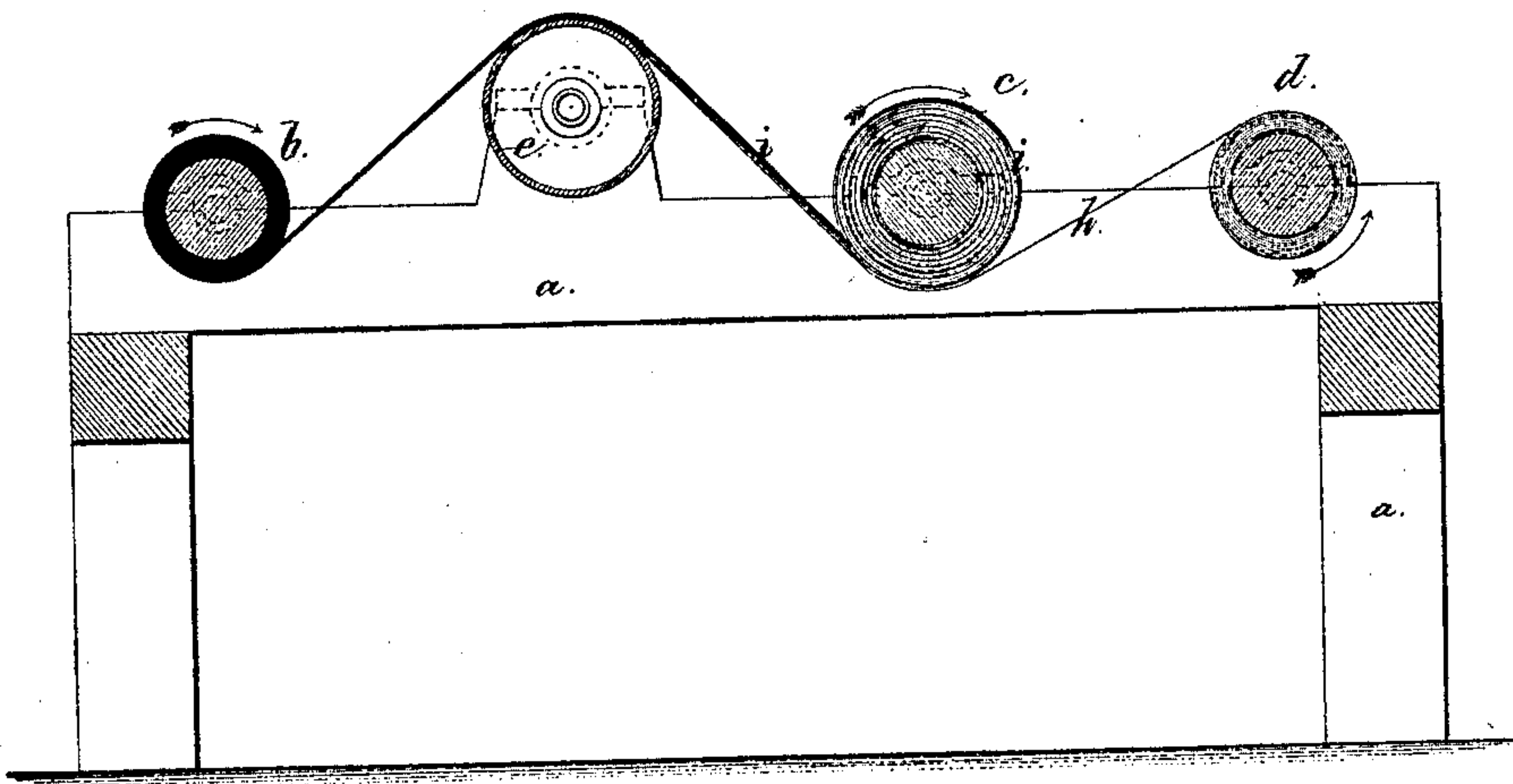


*E. A. Schuette*  
*Coating Paper.*

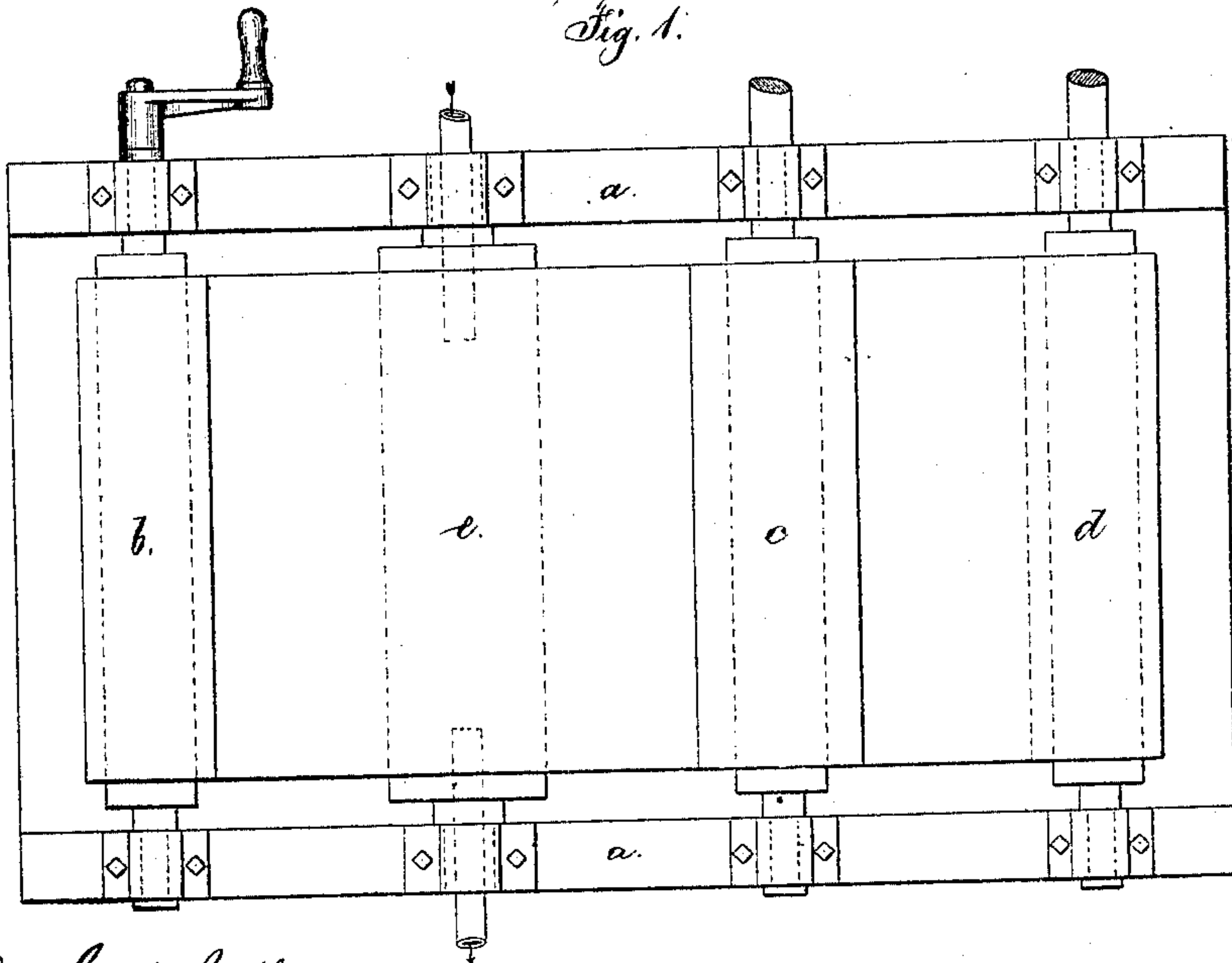
*No. 108,192.*

*Patented. Oct. 11. 1870.*

*Fig. h.*



*Fig. 1.*



*Witness,*

*Chas. H. Smith*  
*Geo. D. Walker*

*Lemuel W. Perrell*

# United States Patent Office.

ERNST A. SCHUETTE, OF NEW YORK, N. Y.

Letters Patent No. 108,192, dated October 11, 1870.

## IMPROVEMENT IN APPARATUS FOR WATER-PROOFING FABRICS WITH GUTTA-PERCHA.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, ERNST A. SCHUETTE, of the city and State of New York, have invented an Apparatus for Water-proofing Fabrics; and the following is declared to be a correct description thereof.

This invention is to facilitate the union of two fabrics by an intervening sheet of gutta-percha, which simultaneously renders the fabrics water-proof.

Difficulty has heretofore arisen in making the union of two fabrics perfect, and keeping the fabrics themselves flat and smooth, when united by a sheet of gutta-percha under an ironing operation performed by hand.

In the drawing—

Figure 1 is a plan of the machine made use of by me for water-proofing the sheets of fabric, and

Figure 2 is a vertical section of the same longitudinally.

The frame *a* of the machine sustains, by journals and boxes, the rollers *b c d*, and also the convex heater, *e*, or roller, that may be fitted to revolve or to remain stationary. In either case, however, the heater *e* is to be warmed (preferably by steam) to a temperature sufficient to soften the sheet of gutta-percha.

The lining *h*, or fabric wound upon the cylinder *d*, passes beneath the roller *c*, and over the heater *e*, to

the roller *b*; and upon the roller *c* the cloth *i* and the sheet of gutta-percha are to be wound, the two thicknesses being supplied together, so that the gutta-percha will come between the lining *h* and cloth *i*, and hence the heat of *e* will cause the two thicknesses of fabrics to be united, and rendered water-proof by the intervening sheet of gutta-percha.

The roller *b* is employed for winding the water-proof fabrics upon, and, by employing a slight friction to detain the rollers *c* and *d*, the proper tension will be obtained for making the fabrics smooth as they pass over the heater *e*, and the two fabrics are firmly united by the gutta-percha, that is softened by said heater, and the fabrics pressed upon the same by being wound upon the roller *b*.

I claim as my invention—

The heater *e* and rollers *b c d*, arranged and acting in the manner specified, to unite and render water-proof two fabrics by gutta percha, as set forth.

Signed this 6th day of September, 1870.

E. A. SCHUETTE.

Witnesses:

CHAS. H. SMITH,  
GEO. T. PINCKNEY.