

(No Model.)

H. D. BRONSON.
METHOD OF FORMING HOLLOW ORNAMENTAL METAL WORK.
No. 428,883. Patented May 27, 1890.

Fig. 3

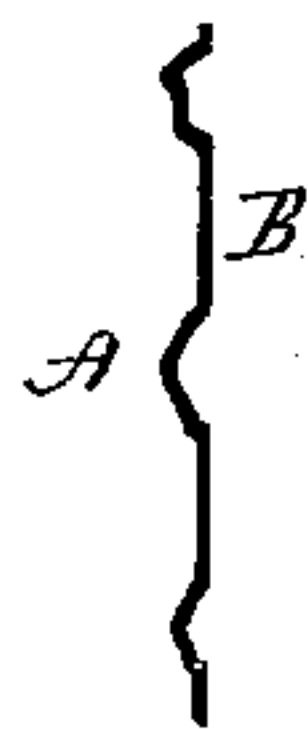


Fig. 1

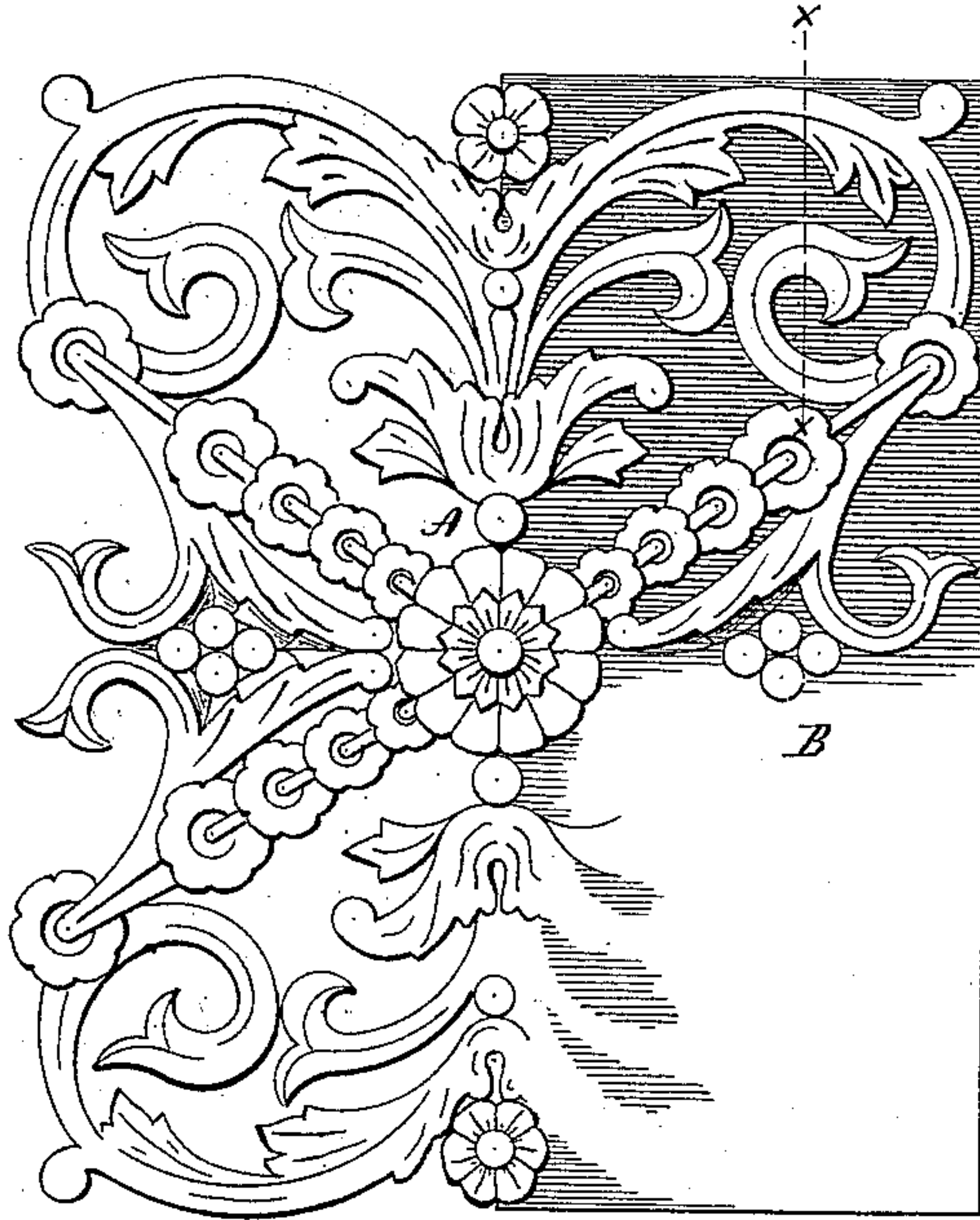


Fig. 2

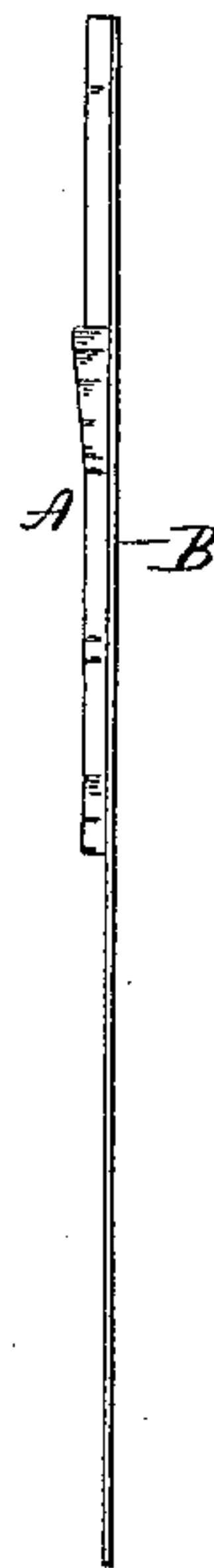
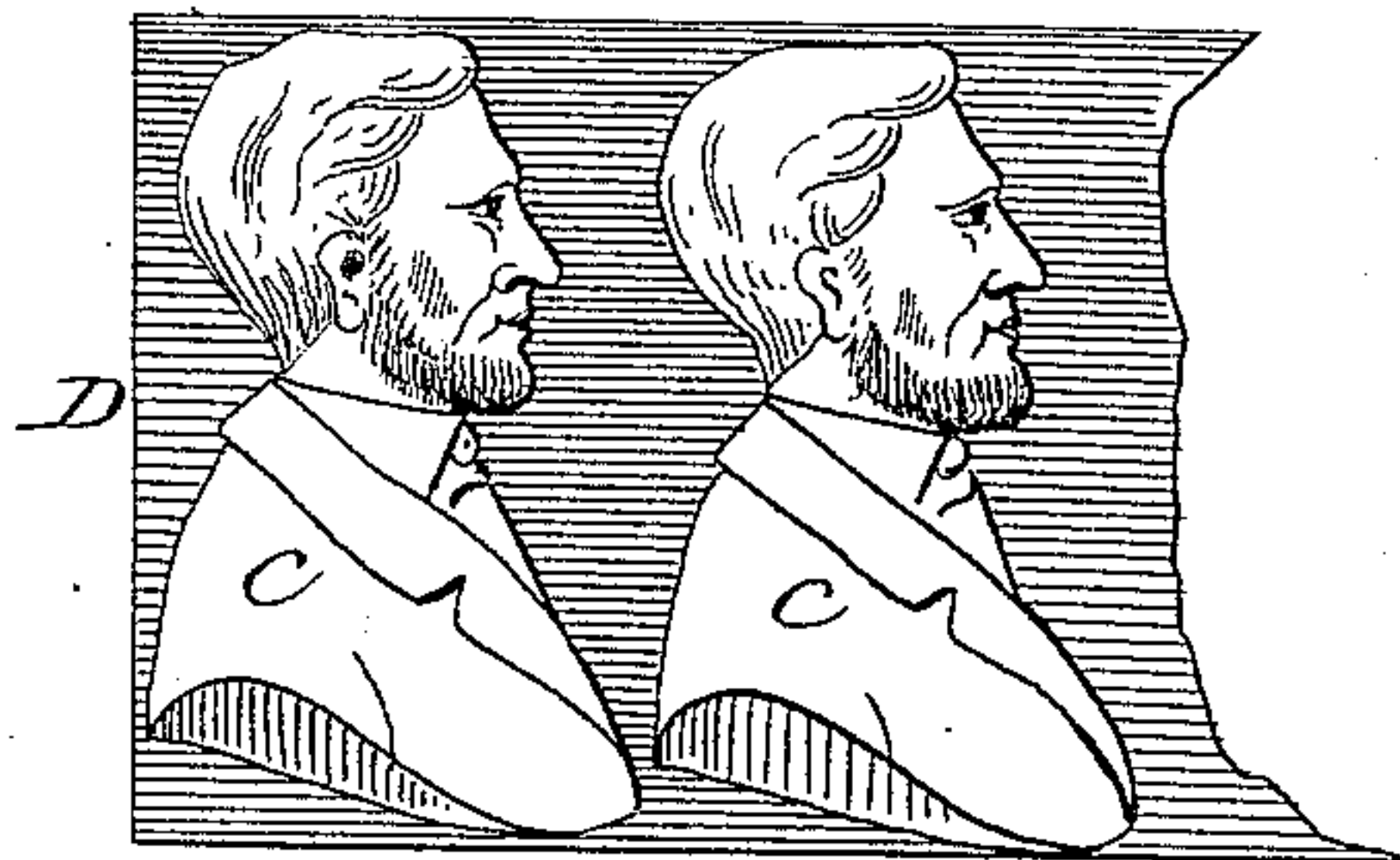


Fig. 4



Witnesses:
J. H. Summway
Lillian D. Haley

Homer D. Bronson
Inventor
By atty.
Earle Seymour

UNITED STATES PATENT OFFICE.

HOMER D. BRONSON, OF BEACON FALLS, CONNECTICUT, ASSIGNOR TO THE
HOMER D. BRONSON COMPANY, OF SAME PLACE.

METHOD OF FORMING HOLLOW ORNAMENTAL METAL-WORK.

SPECIFICATION forming part of Letters Patent No. 428,883, dated May 27, 1890.

Application filed January 15, 1890. Serial No. 336,971. (No model.)

To all whom it may concern:

Be it known that I, HOMER D. BRONSON, of Beacon Falls, in the county of New Haven and State of Connecticut, have invented new
5 Improvements in Methods of Forming Hollow Ornamental Metal-Work; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full,
10 clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in elevation illustrating the first and second steps in my improved
15 method and showing a conventional floral design, together with a portion of its backing, which is formed integral with it; Fig. 2, a view of the said design and backing in end elevation; Fig. 3, a view thereof in section on
20 line *xx* of Fig. 1; Fig. 4, a view in elevation illustrating the use of my invention in the formation of medallions.

My invention relates to an improved method for forming ornamental metal-work, the ob-
25 ject being to produce the same at a greatly-reduced cost for production.

With these ends in view my invention consists in a method of forming ornamental metal-work consisting in first forming a de-
30 sign in relief above a backing and then removing the design from the backing by sawing it therefrom in the plane of the design, or, in other words, at a right angle to the vertical configuration thereof.

35 In carrying out my invention the designs are preferably molded in any suitable material and then electrotyped; but, if desired, they may be produced with dies, which, however, is a more expensive method. In any
40 case, however, the design A will be formed integral with its backing B, as shown by Figs. 1, 2, and 3 of the drawings, the design itself being in relief and hollow, and all of the metal being very light and thin. The design
45 having been formed as required, it is removed from its backing by means of a very thin saw, which runs in the plane of the design, con-

sidered as a whole, or at a right angle to the vertical configuration of the design. The saw, being thin and not encountering much
50 resistance in its operation, removes the design from the backing without distorting the former, although the same is thin and often of soft metal. When the design is removed
55 from its backing, it forms an open floriated panel, and may be then mounted in any way that convenience or taste may dictate.

In making medallions or solid or unbroken objects, as shown by Figs. 5 and 6 of the drawings, the medallions C are preferably
60 duplicated in numbers in large backing-sheets D, and then sawed from the same, as above set forth, and mounted in any suitable fashion.

Heretofore ornamental metal-work of the
65 character to which my invention applies has been made by the electrotpe process, the backing having been removed from the design by grinding it off by means of a wheel,
70 which reduced the backing to powder. Under this old process, however, the thin metal forming the design was often distorted, and it could not be successfully carried out with-
out filling the design with solder, which made the process laborious and expensive. My im-
75 proved method, on the other hand, may be conducted rapidly and cheaply, and in no wise impairs the integrity of the design.

Having now fully described my invention, what I claim as new, and desire to secure by
80 Letters Patent, is—

The method of making metal ornaments, consisting in forming a design in relief above a backing of metal, with which it is formed
85 integral, and then removing the design bodily from the backing by sawing it therefrom in the plane thereof, and preserving the design so removed and utilizing it as an ornament, substantially as described.

HOMER D. BRONSON.

Witnesses:

GEO. D. SEYMOUR,
FRED C. EARLE.