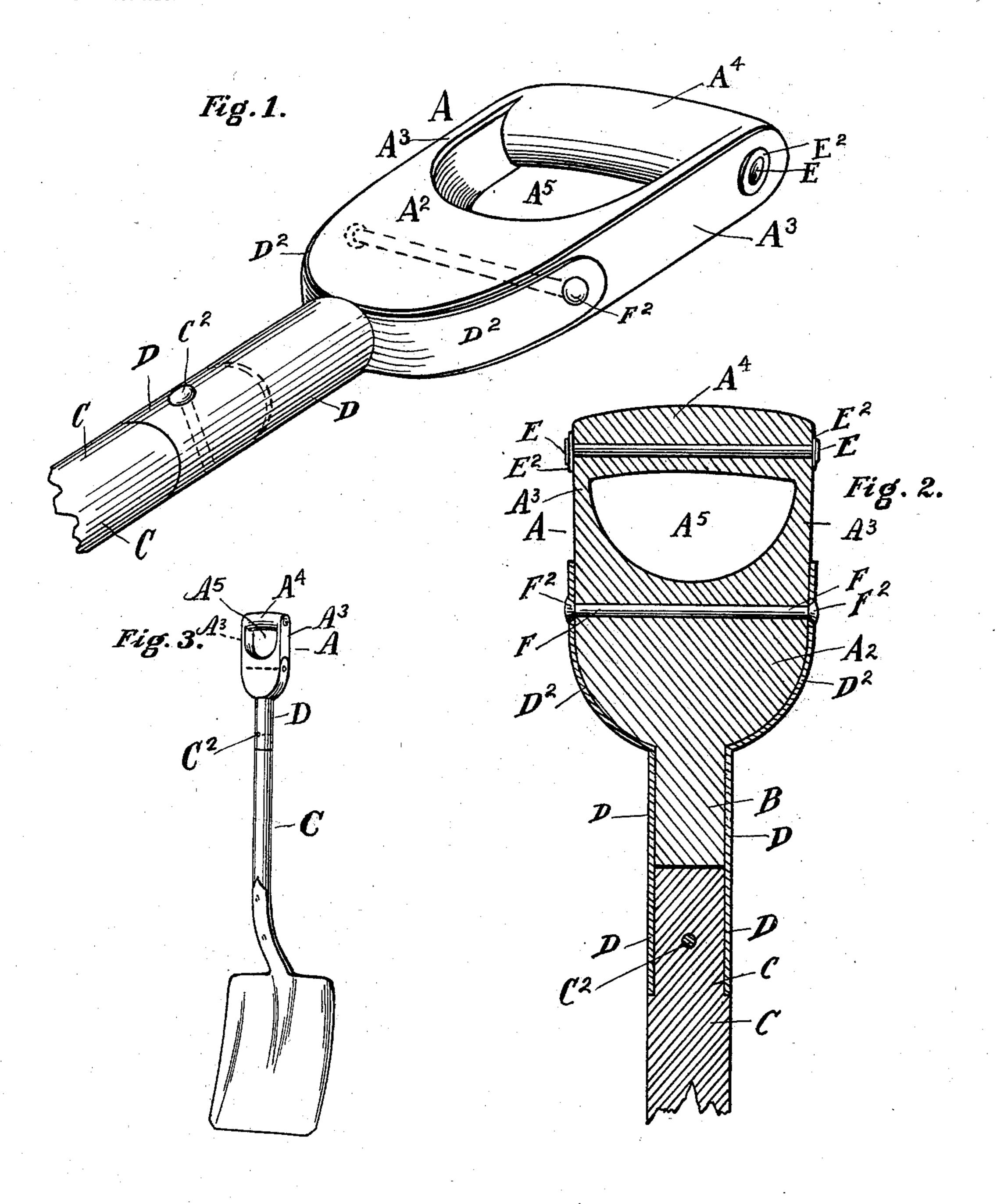
G. THOMPSON. SHOVEL.

APPLICATION FILED OCT. 24, 1903.

NO MODEL.



WITNESSES: Charles G. Spingel. M. Smith

George Thompson_ BY Ohn. Hubbell Fisher ATTORNEY.

United States Patent Office.

GEORGE THOMPSON, OF VINCENNES, INDIANA.

SHOVEL.

SPECIFICATION forming part of Letters Patent No. 750,413, dated January 26, 1904.

Application filed October 24, 1903. Serial No. 178,303. (No model.)

To all whom it may concern:

Be it known that I, George Thompson, a citizen of the United States, and a resident of the town of Vincennes, in the county of Knox and State of Indiana, have invented certain new and useful Improvements in Shovels, of which the following is a specification.

Economy in the use of wood is always in these days a desideratum. Economy in any of the operations of a manufacture is also a

desirable thing.

One of the principal objects of my invention

is to effect a saving in wood.

Another of such objects is to economize in the operation of making the hand portion and of the shank of the shovel-handle.

A third principal object is to provide a new and effective construction for enabling the hand portion or bow end of the handle and the shank when made in two pieces to be united in a novel and very efficient manner.

Other objects of my invention will herein-

after appear.

The several features of my invention and the various advantages resulting from their use conjointly or otherwise will be apparent from the following description and claims.

I will now describe my invention in detail. In the accompanying drawings, making a 30 part of this specification, and in which similar letters of reference indicate corresponding parts, Figure 1 is a view in perspective of the upper portion of a handle, illustrating my invention. Fig. 2 represents a longitudinal cen-35 tral section taken in a plane which passes through the bow end—i. e., upper end—of the handle from edge to edge and through the axial center of the shank or rounded portion of the handle, which latter extends from the 40 bow end to the scoop or plate at the other or lower end of the shovel. Fig. 3 is a view in perspective, on a diminished scale, of a shovel embodying the features of construction shown in Figs. 1 and 2.

A indicates generally the bow end of the shovel. The bow end is of wood and consists of the main portion A² and the side extensions A³ A³, one on each side, extending from the main portion A² of the handle to the trans
5° verse part or grip-piece A⁴. An opening A⁵

is formed in the handle, and this aids in forming the grip-piece A⁴ at the one end and the main portion A² opposite to this grip-piece. The grip-piece A⁴ is rounded, as shown, to afford a better opportunity for the hand to grasp 55 it. The portion A² and the extensions A³ A³ and the grip-piece A⁴ are in one piece, being cut out of a single piece of wood. The preferred kind of wood is ash, but hickory or certain other kinds of hardwood can be em-60 ployed therefor.

Of course there has been present a shank C, which connected the handle A to the shovel or scoop-piece at the opposite end of the shovel. The handle and shank have been in one piece. 65 In the manufacture of this handle and shank out of one piece of wood there is obviously of necessity a great waste, because the handle is wide and the shank narrow and much wood must be cut away to form the finished article 70 of handle integral with the shank ready for the attachment thereto of the shovel or scooppiece. My invention serves to economize this waste and at the same time to present a handle stronger than the one described where the 75 enlarged handle end A and the shank are in one.

I form the handle A as specified, to wit: I provide the main part A² and the grip-piece A⁴ and the side extensions A³ in one piece; but 80 I do not stop there. I form on the lower end of the handle a short shank B, preferably of about one and three-quarters inches in length. All of these parts—namely, the main portion A², the grip-piece A⁴, side-pieces A³, and the 85 shank-point B—are of wood and in one piece. The remainder C of the shank is formed of another piece of wood. As this shank C is comparatively slim—i. e., of small diameter it can be made out of small thin pieces of 90 wood either cut for the purpose or left over from other manufacture. The lower end of this shank C is duly connected to the shovel or scoop-piece at the lower end of the shovel.

The short shank B, I provide while having 95 in view new and efficient means of connection between the bow-handle A and the shank C, and the short shank B performs a valuable function in this connection. These means consist of a ferrule D, preferably of metal. This 100

ferrule D is adapted at its upper end to receive the short shank B and at its lower end to receive the upper end of the shank C. The adjacent ends of the shanks B and C preferably 5 touch each other. From the upper end of this ferrule D, I extend side extensions or straps D² and carry these, respectively, up the adjacent edge of the part A^2 of the bow-handle. There are in the ordinary wooden bow-handle made 10 in one with the entire shank below two bolts. The upper one, E, passes through the grippiece A⁴, and its functions are to prevent this grip A⁴ from splitting into pieces and to keep the sides A³ A³ close to and in one with the 15 grip-piece. The bolt E is preferably at each end provided with a washer, and the head of the bolt is there spread (by the riveting process) upon the outer part of the adjacent washer. The lower bolt or rod F², preferably 20 a rod, passes through the main portion A² of the bow-handle and secured in position by proper means serves to hold the latter in shape and prevent it from being split. It is this latter rod F² that I utilize not only for the afore-25 mentioned purpose, but also for holding the upper ends of these straps or extensions D² D² of the ferrule close to the bow-handle and in their proper position relative to this bow-handle. This rod goes through not only the bow-30 handle part A2, but through these side extensions D². Thus the rod performs a double function. This rod F² is duly riveted at each end outside of the extensions D² D², and thus the parts mentioned are held securely in 35 place.

The shank extension B prevents the bow-handle A from oscillation relatively to the ferrule D and constitutes the lower brace, while the rod F² constitutes the upper brace, whereby, in connection with the extensions, the handle-piece A is held firmly and rigidly to the ferrule D.

The upper end of the long shank C is held in the ferrule D, so that it cannot slip out from 45 it. The preferred means for thus keeping it within said ferrule is the pin or bolt C², extending through the shank and through the opposite sides of the ferrule and riveted at the ends to keep it from slipping out of position.

This entire construction is economical of

cost in construction and enables a great saving of valuable wood to be effected. The resultant shovel is very efficient and very durable.

It will be understood that this construction can be applied to implements other than shovels—that is to say, it is applicable to implements where a wooden bow-handle and a wooden shank are required.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. In an implement, the wooden bow-handle, provided with the short extension wooden shank B integral therewith, and the separate 65 long wooden shank C, the ferrule D embracing the short shank B and the upper portion of the shank C, the ferrule having the extensions against the adjacent edges of the handle-piece A², and means for securing the long 70 shank to the ferrule, and the extensions to the bow-handle, substantially as and for the purposes specified.

2. In an implement, the wooden bow-handle, provided with the short extension wooden 75 shank B integral therewith, and the separate long wooden shank C, the ferrule D embracing the short shank B and the upper portion of the shank C, the ferrule having the extensions against the adjacent edges of the handle-80 piece A², and means for securing the long shank to the ferrule end, the bolt F², connecting the extensions and the handle-piece A², substantially as and for the purposes specified.

3. In an implement, the wooden bow-han-85 dle, provided with the short extension wooden shank B integral therewith, and the separate long wooden shank C, the ferrule D embracing the short shank B and the upper portion of the shank C, the ferrule having the exten-90 sions against the adjacent edges of the handle-piece A², the rod F² connecting the extensions and the handle-piece, and the bolt C² connecting the ferrule and the long shank, substantially as and for the purposes specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEO. THOMPSON.

Attest:

F. A. THOMPSON, ANGUS GAINES.