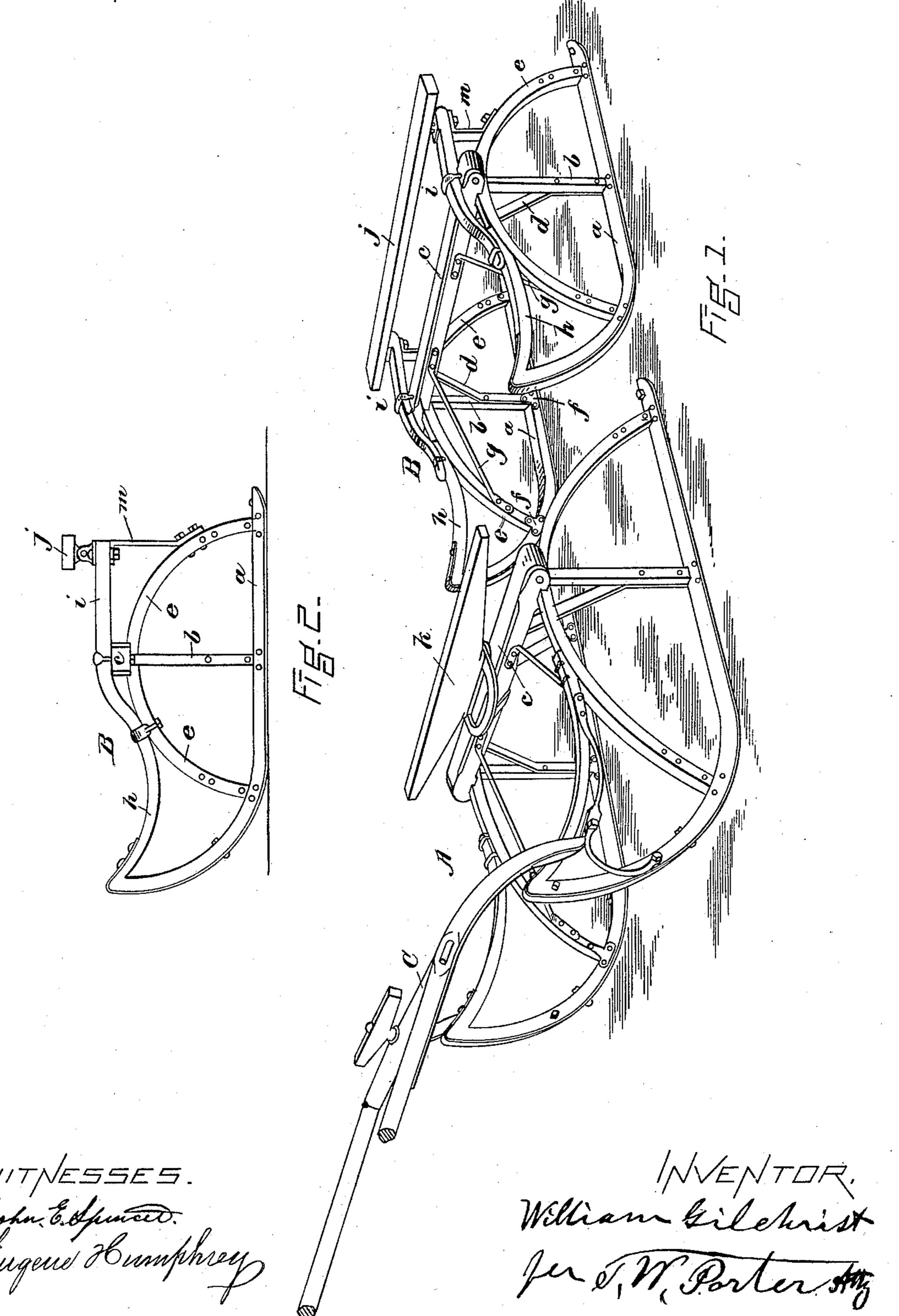
W. GILCHRIST.

SLED.

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SLED.

SPECIFICATION forming part of Letters Patent No. 390,588, dated October 2, 1888.

Application filed November 25, 1887. Serial No. 256,052. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GILCHRIST, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Sleighs and Sleds, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

In said drawings, Figure 1 is a perspective view of a so-called set of "traverse runners" embodying my invention. Fig. 2 is a detached side elevation showing a modification of my invention.

invention.

My invention relates to the "under works" or "running parts," so called, of sleighs and sleds, and more particularly to the class or kind termed "traverse runners;" and it consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring again to the drawings, A represents the front runners, to which shafts C are attached by being pivoted to the hanging irons in the common and well-known manner.

B represents the hind runners, which possess all the essential features of the front runners, and hence a full description thereof will in the main suffice for both.

The runners proper are shown at a a, in each of which is inserted the standard b, which are united with the arched bars e, of bent wood, which at their ends are secured to runners a. A bar, c, unites the respective sides, the sluebraces d serving to aid in securing together the sides and bar. The bent bars h are at their forward ends secured to runners a and at their rear ends to bar e, while bars i, which rest upon and are secured to bar c, are at their front ends secured to bar h, while at their rear ends they support the body-bar j, which is pivotally secured to them in a well-known manner, as shown in Fig. 2.

The curved truss-bars e are re-enforced at their junction with runners a by T-irons f, as shown; and the braces g, extending from bars e to bars e, serve both as slue and quartering braces.

It will be understood that the body is secured to and rests upon said bar j and rocker k, which latter is pivoted upon bar c of the forsec ward runners.

In Fig. 2, instead of parts h and i being

formed separately, they are shown as a single piece; but such change is obvious and is but the equivalent of that shown in Fig. 1. The rear end of bar *i* is supported by strut *m*, secured at its lower end to bar *e*. The bars *e* not only serve as fore-and-aft braces, but they truss and strengthen the runners, and with bars *h* give the runners support and a large degree of resistance to force in proportion to 60 their weight.

Although my invention is shown in connection with traverse runners, and with but one standard, b, to each runner a, yet, if desired, it may be employed with a plurality of stand- 65

ards, if preferred.

I am aware of United States Patent No. 272,532, issued February 20, 1883, to L. Debolt, Jr., and I claim nothing that is shown therein, my invention differing from that shown in 70 said patent, in that I employ a standard, b, that constitutes a direct unyielding support from the runner to the apex of the truss-bar and to the end of cross-bar c, and a slue-brace, d, that is connected directly with the cross- 75 bar and standard to furnish the lateral support for the standard, while in said patent there are no standards in the well-understood sense of that term, the top and its load being supported entirely upon arches, and not upon 80 standards, and the iron o is not only not secured to the runner, but to the lower part of arch-bar N; but it is incapable, from its form, of serving as a standard, it having no shoulder at its upper portion, and it can only serve as 85 a tie-rod to hold the bar G down upon the top of truss-rod B, which is its sole office.

I claim as my invention—

1. The combination of runners a, bent-wood truss - bars e, cross-bar c, extended over and 90 secured upon truss bars e, standards b, united to said runners and arranged to serve as a direct support to the load, and slue-braces d, uniting the standards and cross-bar, substantially as specified.

2. The combination of runners a, standards b, truss bars e, cross-bar c, extended over and secured to the truss-bars, and bars h, secured to the runner at their front end and to the truss-bars in front of bar c, substantially 100 as specified.

3. The combination of runners a, standards

b, truss bars e, cross-bar c, extended over and united with truss-bars e, bars h, united with the runners at their front ends and with bar e, bars i, extending from bars h and supported upon bars i in rear of bar c, substantially as specified.

4. The combination, with runners a, stand-

ards b, bar c, and truss bars e, of braces g, secured to said bars c and e, substantially as cospecified.

WILLIAM GILCHRIST.

Witnesses:
T. W. PORTER,
JOHN E. SPENCER.