

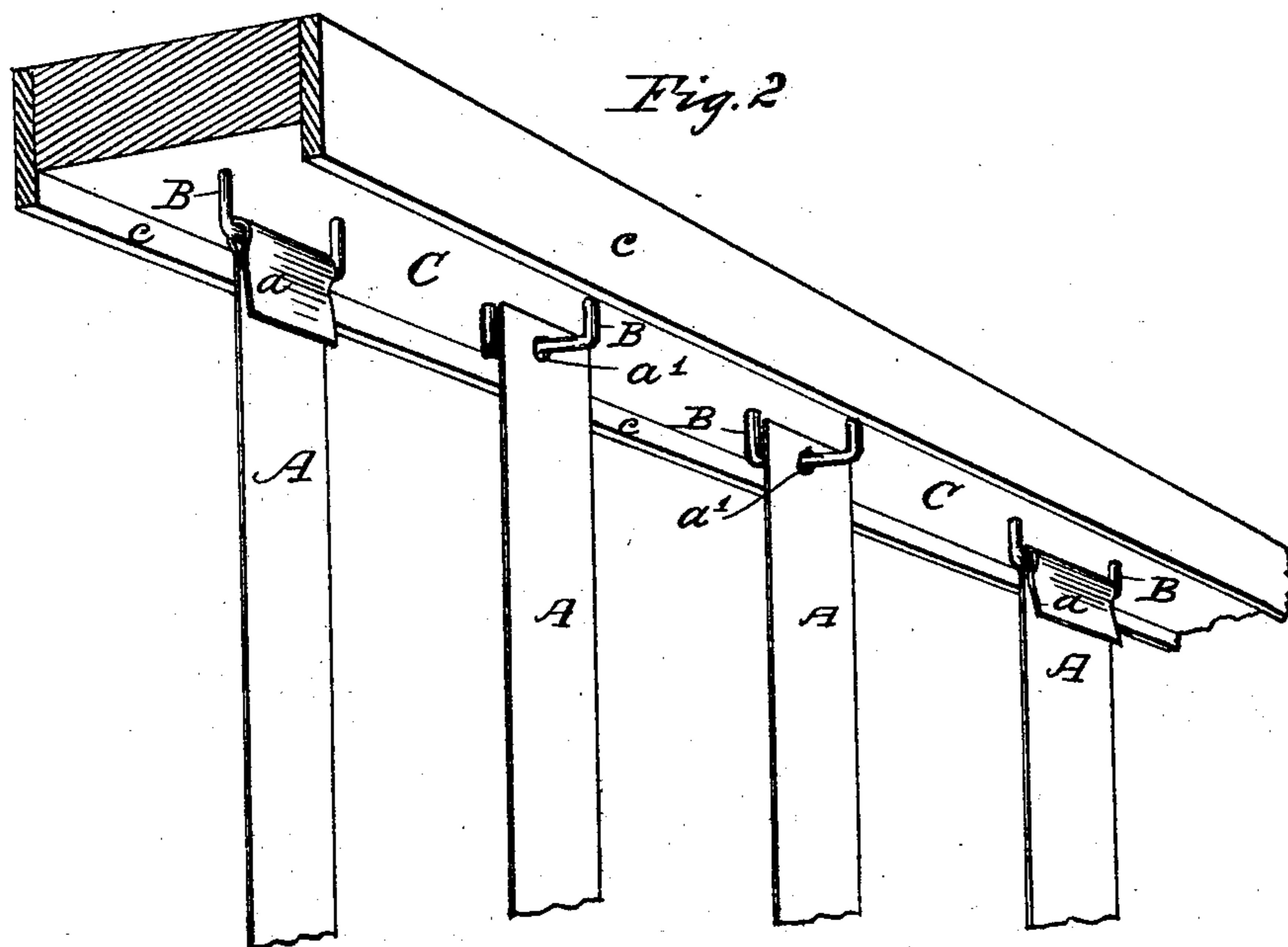
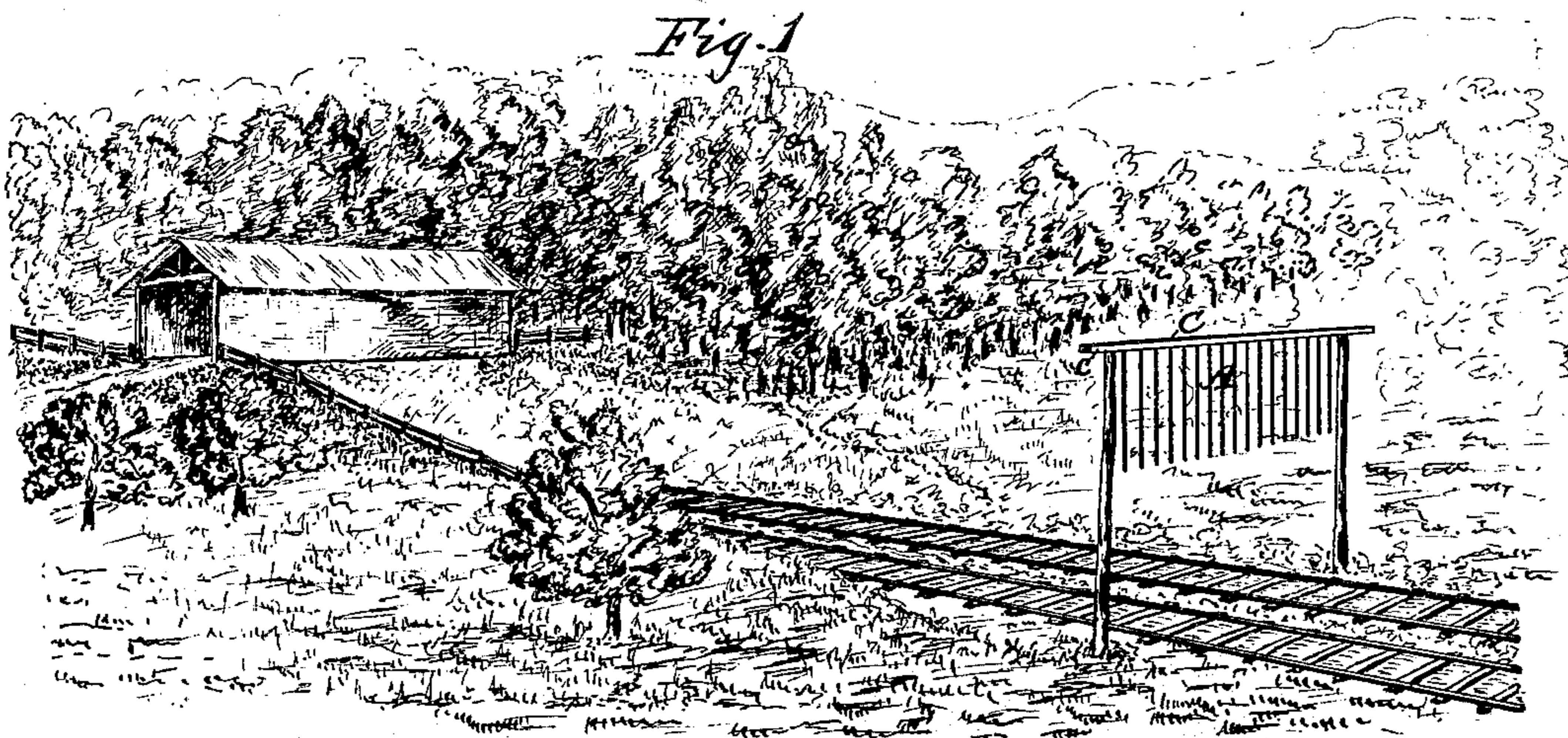
(No Model.)

G. S. MORRILL.

BRIDGE GUARD FOR RAILROADS.

No. 361,018.

Patented Apr. 12, 1887.



Witnesses

F. A. Merrill  
J. L. Sawtelle

Inventor.

G. S. Morrill  
By J. B. Thurston  
Attorney

# UNITED STATES PATENT OFFICE.

GEORGE S. MORRILL, OF BOSTON, MASSACHUSETTS.

## BRIDGE-GUARD FOR RAILROADS.

SPECIFICATION forming part of Letters Patent No. 361,018, dated April 12, 1887.

Application filed February 3, 1887. Serial No. 226,341. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE S. MORRILL, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Bridge-Guards for Railroads, of which the following is a specification.

The object of this invention is to provide means for warning brakemen on freight-trains of their near approach to a bridge, and give them time to stoop to escape being hit while passing under. Heretofore band-irons have been suspended from a cross-beam, to which their upper ends were rigidly fastened, and permitted to yield somewhat when struck by contact with a brakeman, the natural spring of the metal being depended upon wholly for returning the pendant to a perpendicular position. This, however, is a failure, as very frequently these pendants are bent out and never return to their normal position; thus, in case of a double-track road, rendering them as good as useless, and in case of a single-track road, where trains are passing in both directions, making it possible for the end of one of said pendants to hit a man in the eye, or other parts of the face, while yet inclined toward him at an angle of about forty-five degrees.

My invention obviates these difficulties; and it consists in bending the end of a piece of band-iron in the form of a hook, or in boring a hole near the end, through which an ordinary staple may be inserted, and so driven into the cross-beam as to allow said depending band-iron to swing in either direction parallel to the track when hit or set in motion.

The invention is clearly illustrated in the drawings forming part of this specification and filed herewith, of which—

Figure 1 is a view in perspective, showing a piece of road with a section of a bridge and my improved bridge-guards hanging from a beam swung across the track. Fig. 2 is an enlarged view in perspective showing two forms of making my improved guards and attaching them to the cross-beam.

Similar letters indicate corresponding parts.

My improved pendant A may be bent at one end somewhat in form of a hook, *a*, so as to hang upon a staple, B, which is driven into a beam, C, suspended across a railroad-track, or said pendant A may be provided with a hole, *a'*, bored a loose fit for said staple B, through which said staple must be inserted before being driven into the cross beam C. The method of bending the said iron, as at *a*, is, however, more simply and economically accomplished, and for this reason is probably preferable.

In order to prevent the collection of snow or ice upon the hinge formed by the connection of the said pendant to the staple and causing them to freeze stiff, narrow boards *c* may be added to the sides of the beam C, which may project far enough below the under surface of said beam to protect the staple from the snow and ice, and still not so far but that said pendants may swing sufficiently in either direction.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As a bridge-guard for railroads, the combination, with a cross-beam and staples inserted at various points on its bottom side, of pendants formed of light band iron or metal and loosely connected at their tops to said staples, substantially in the manner and for the purpose set forth.

2. As a bridge-guard for railroads, the combination, with a cross-beam having suitable side boards attached, as shown, and staples inserted at various points on its bottom side, of pendants formed of light band iron or metal and loosely connected at their tops to said staples, substantially in the manner and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE S. MORRILL.

Witnesses:

J. B. THURSTON,  
J. H. ALBIN.