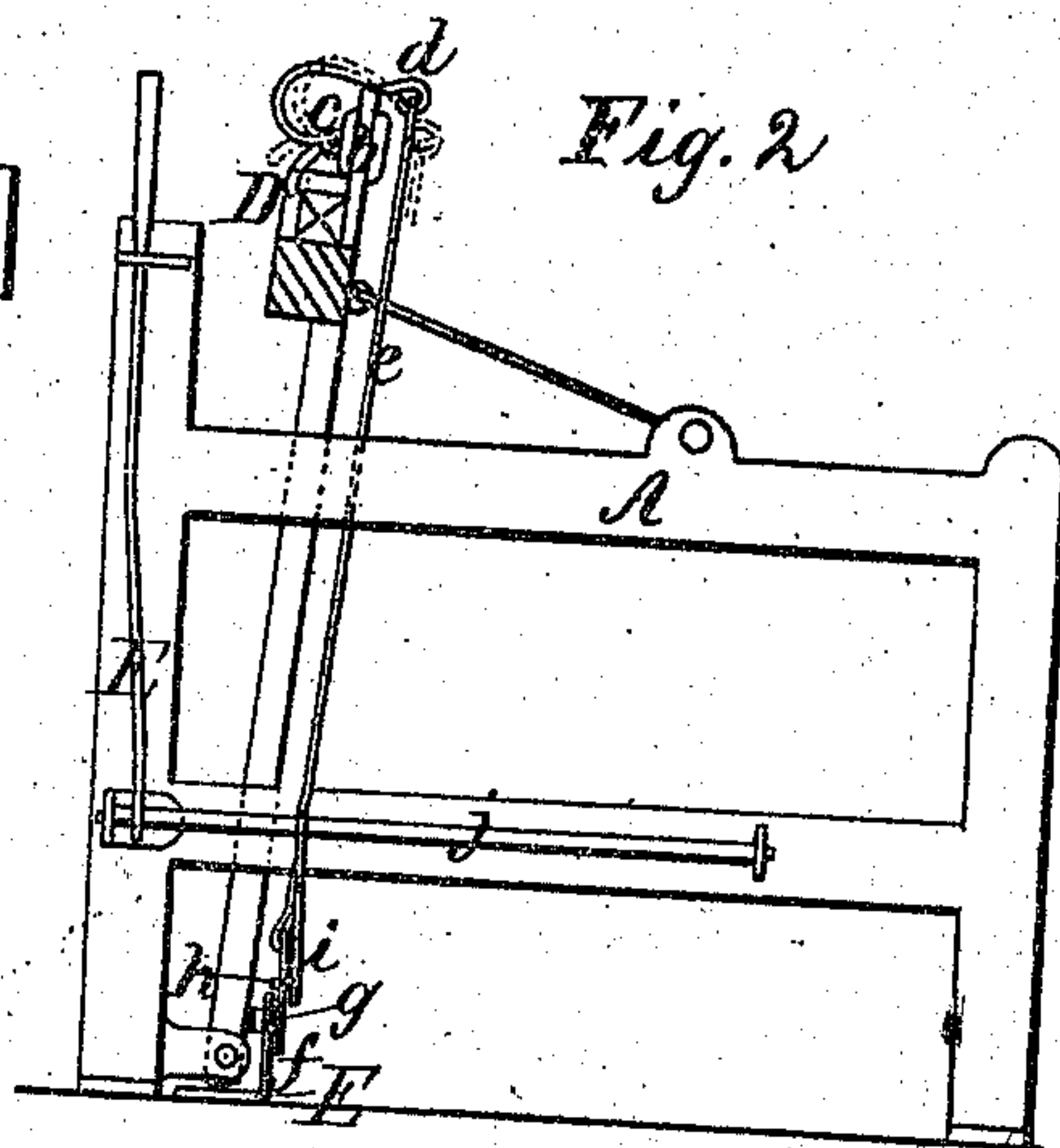
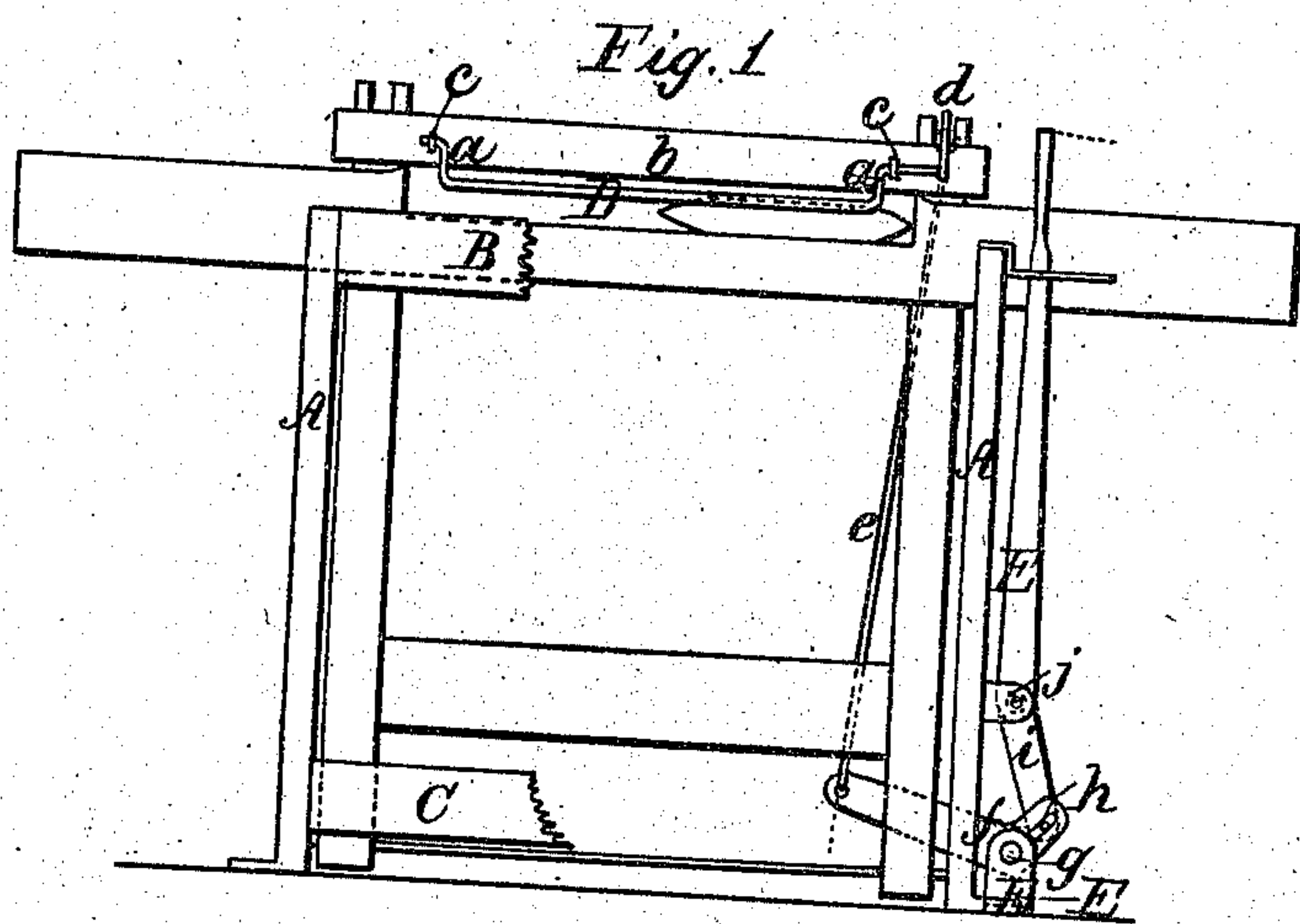


When sent to the printer

D. S. Harris.
Shuttle Guard.

N^o 12,593.

Patented Mar. 27, 1855.



UNITED STATES PATENT OFFICE.

DAVID S. HARRIS, OF COVENTRY, RHODE ISLAND.

LOOM.

Specification of Letters Patent No. 12,593, dated March 27, 1855.

To all whom it may concern:

Be it known that I, DAVID S. HARRIS, of Coventry, in the county of Kent and State of Rhode Island, have invented a new and useful Improvement in Shuttle-Guards for Power-Looms; and I do hereby declare that the following is a full, clear, and exact description of the same; reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a front view of the frame and lay of a power loom with my invention applied, and Fig. 2, is a side view of the same.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in the connection of the shuttle guard with the belt shipper in such a manner that the shuttle guard is in its operative position only while the loom is in gear, and when the loom is out of gear the guard is raised so as to be out of the way of the attendant while picking out, or drawing threads through the reed.

A, A, are the side frames of the loom.

B is the breast beam, and C, the lower front rail, both of which are represented as partly broken away in Fig. 1, to expose the connections between the shuttle guard and the belt shipper.

D, is the shuttle guard consisting of a light iron rod secured to the lay cap *b*, by two staples *c, c*, which serve as bearings. This rod cranked at *a, a*, to throw it forward over the shuttle race to enable it to lay over the shuttle as shown in Fig. 2, and the end nearest the shipper is bent backwards over the lay cap to form an arm *d*, to be connected by a light connecting rod *e*, with the longer arm at a lever *f*, which works on a fixed fulcrum *g*, in a stand E, on or near the floor. The shorter arm of the

lever *f*, is slotted to receive a pin *h*, which is fast on an arm *i*, secured to the arbor *j*, of the shipper E.

When the loom is in gear the guard lays over the shuttle race in such a position that the shuttle passes between it and the reed and can not possibly escape from the loom, but when the belt is unshipped the arm *i*, is thrown towards the loom, carrying the shorter arm of the lever *f*, in the same direction and throwing down the longer arm, which draws with it the connecting rod *e*, and the arm *d*, of the shuttle guard raising the shuttle guard as shown in red outline in Fig. 2.

I do not claim the shuttle guard as I am aware the shuttle guards substantially similar to that I have shown have been employed attached fixedly to the lay, or if movable requiring to be moved by hand. And I do not confine myself to the use of a shuttle guard constructed precisely like that described; but

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

The connection of the shuttle guard in any way substantially as described with the belt shipper in such a manner that when the loom is in gear the guard may stand over the shuttle race in such a way as to prevent the shuttle flying out of the loom, but when the loom is out of gear the guard may be raised out of the way of the attendant, to enable threads to be picked out or drawn through the reed or such other manipulations to be performed as may be necessary.

DAVID S. HARRIS.

Witnesses:

HENRY D. EARLE,
HORACE CLARKE.