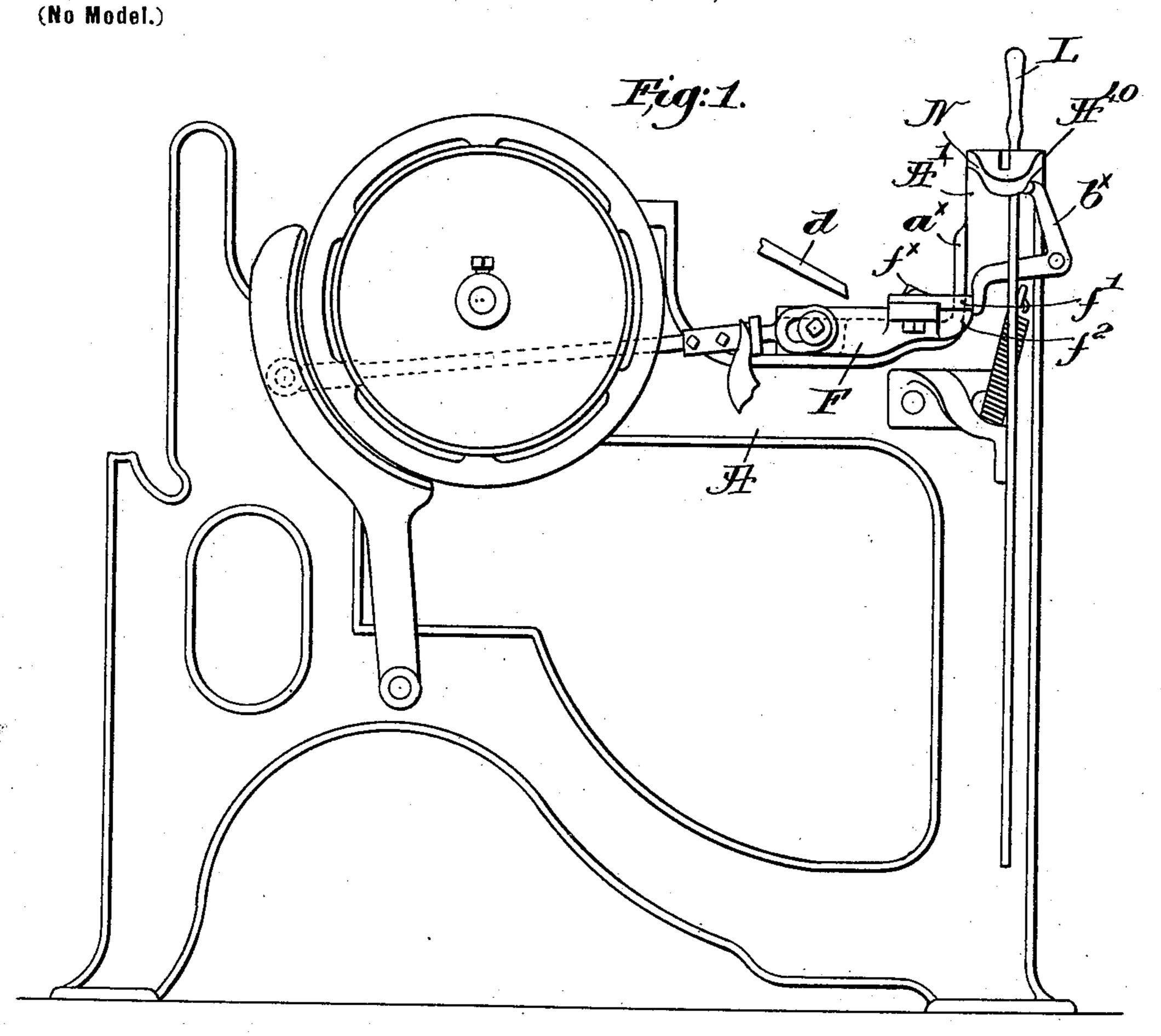
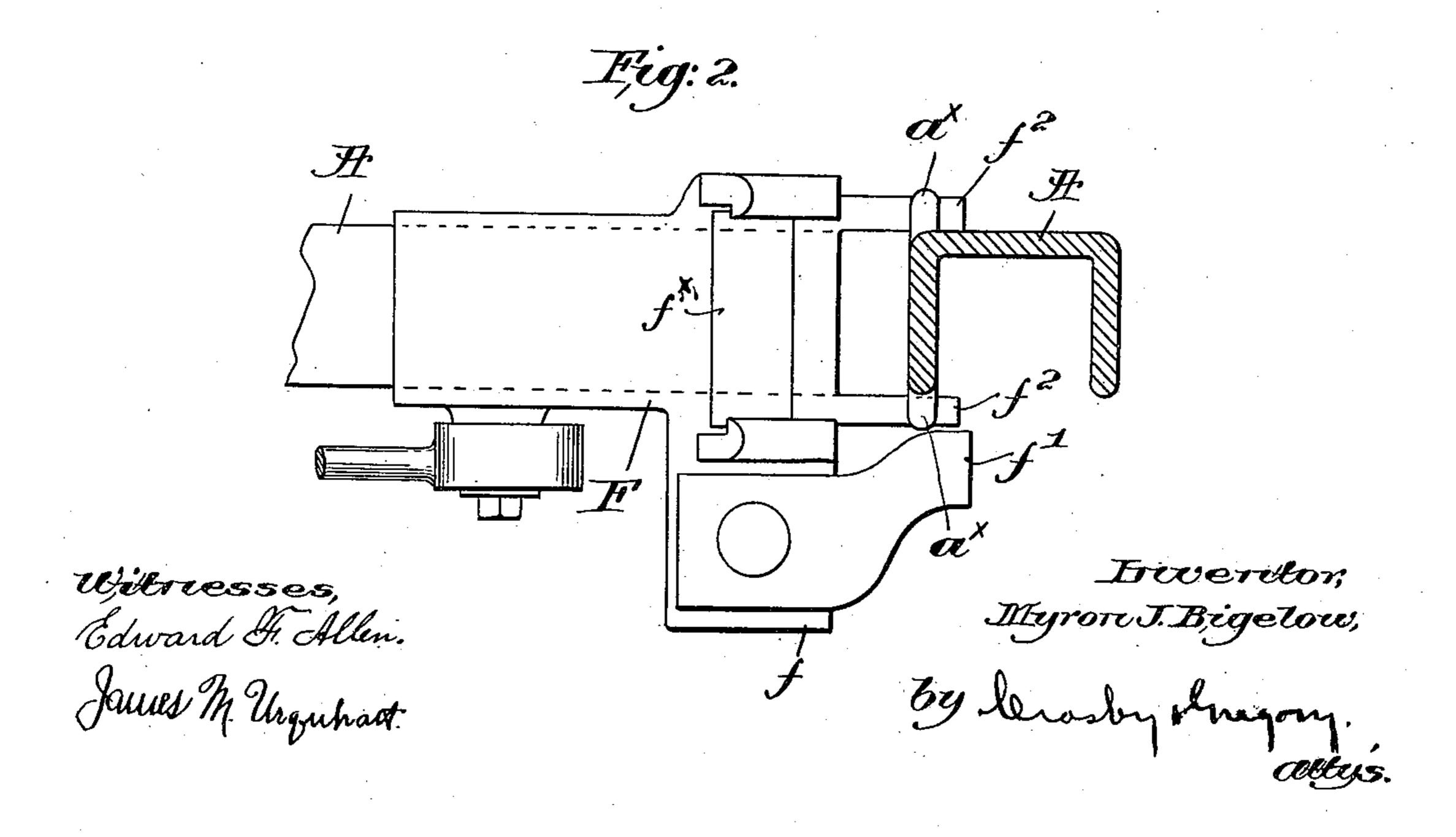
M. J. BIGELOW.

PROTECTOR MECHANISM FOR LOOMS.

(Application filed Oct. 6, 1898.)





United States Patent Office.

MYRON J. BIGELOW, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO THE DRAPER COMPANY, OF SAME PLACE AND PORTLAND, MAINE.

PROTECTOR MECHANISM FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 618,374, dated January 24, 1899.

Application filed October 6, 1898. Serial No. 692,811. (No model.)

To all whom it may concern:

Be it known that I, MYRON J. BIGELOW, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement 5 in Protector Mechanism for Looms, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The protector mechanism usual on backbinder looms includes a frog-lift mounted on a sliding frog adapted to travel on the loom side, the dagger engaging the frog-lift when the shuttle is improperly boxed to thereby 15 stop the loom. Engagement of the frog-lift by the dagger causes a great strain on all the parts, and it is highly desirable to preserve absolute alinement in the travel of the frog and also prevent tipping thereof; and my 20 present invention has for its object the production of means for attaining such results.

Figure 1 is a left-hand side view of a loom with my invention applied thereto; and Fig. 2 is a top or plan view, enlarged, of the frog, 25 showing more clearly my invention.

The loom-frame A, breast-beam A⁴⁰, having the holding-plate N for the shipper-lever L to actuate the belt-shifting devices, (not shown,) and the knock-off lever b^{\times} for the shipper-30 lever, adapted to be operated by an arm f', fast on an offset f of the usual frog F, mounted to slide on the loom side, may be and are all of usual or well-known construction.

The frog-lift f^{\times} , mounted on the frog and to 35 be engaged at times by the dagger d, (only partially shown in Fig. 1,) is of usual construction and forms no part of my invention. I have herein shown the forward end of the

frog F as provided at the sides with two separated projections f^2 , extended forward 40 beneath two opposite and laterally-extended lugs a^{\times} , formed on the upright corner portion A' of the loom-frame, preferably cast thereon. As the frog slides on its support the fixed lugs above the projections f^2 prevent tipping 45 of the frog and, passing at opposite sides of the part A' of the frame, insure the movement of the frog in proper alinement without any opportunity to twist.

The device is exceedingly simple, durable, 50 and highly efficient in attaining the desired

objects.

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

1. In a loom, the frog adapted to slide on the loom-frame, projections on and extended beyond the front of the frog, and fixed guidelugs on the loom-frame, beneath which said projections extend, to prevent tipping or 60 twisting of the frog in its sliding movement.

2. In a loom, the frog adapted to slide on the loom-frame, separated projections on and extended beyond the front of the frog to pass on opposite sides of a part of the loom-frame, 65 and fixed guide-lugs on such part of the frame above the projections, to prevent lateral tipping of the frog in its sliding movement and insure its movement in proper alinement.

In testimony whereof I have signed my 70 name to this specification in the presence of

two subscribing witnesses.

MYRON J. BIGELOW.

Witnesses:

GEO. OTIS DRAPER, ALBERT H. COUSINS.