

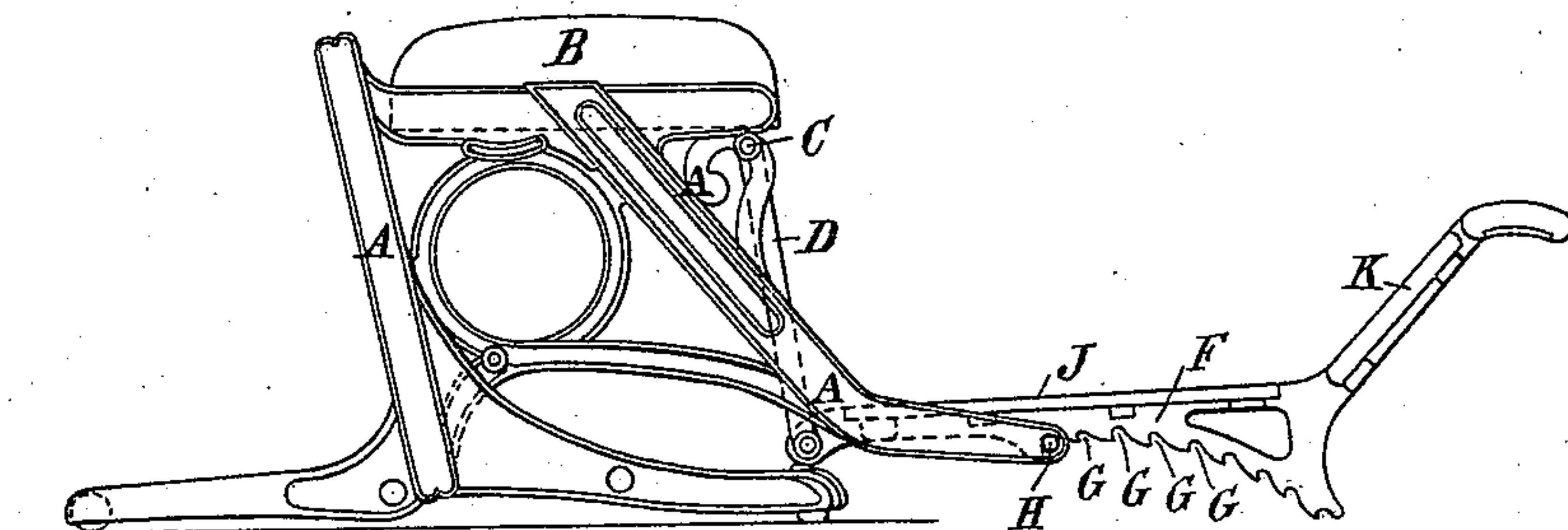
(No Model.)

T. H. & E. GARDNER.  
ADJUSTABLE FOOT BOARD.

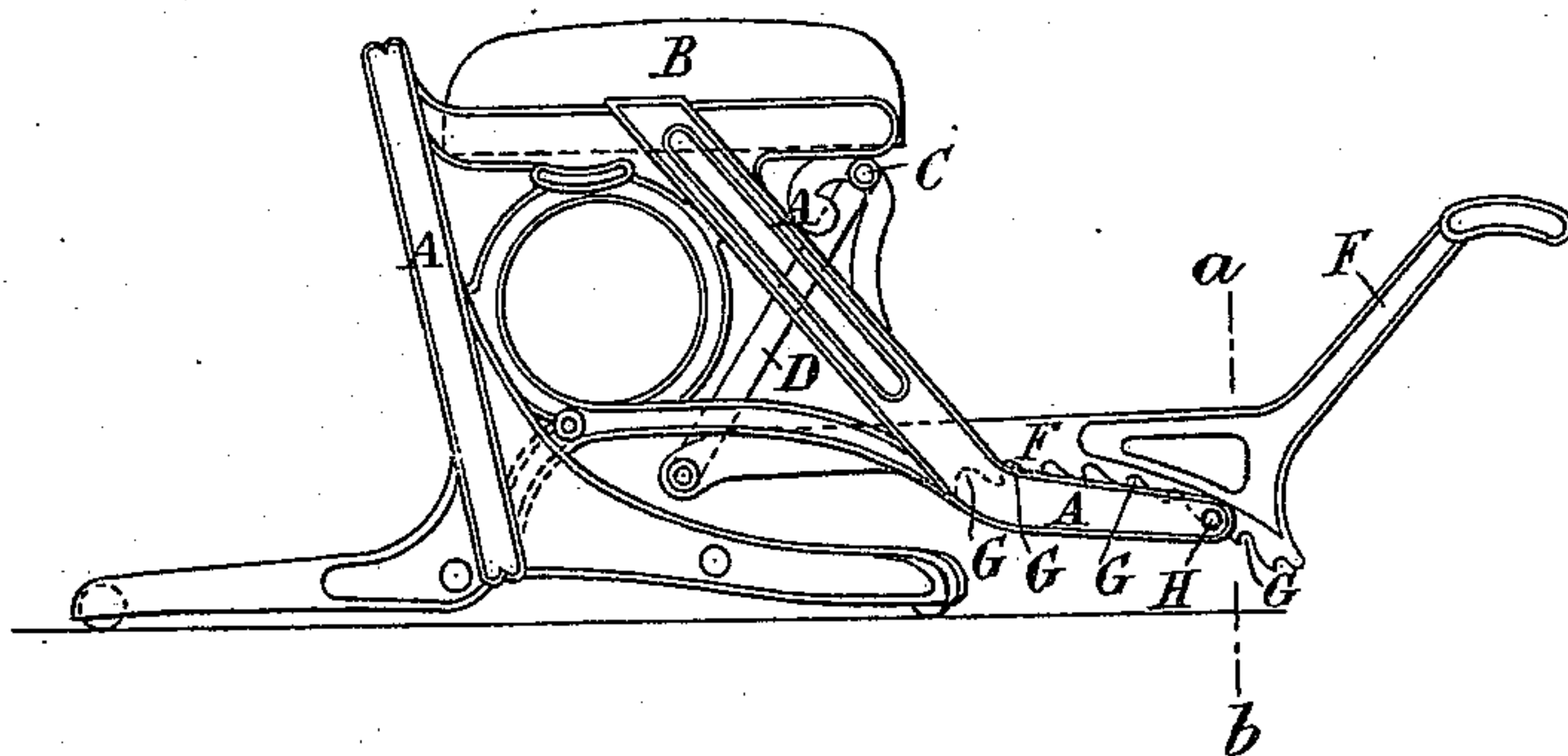
No. 547,517.

Patented Oct. 8, 1895.

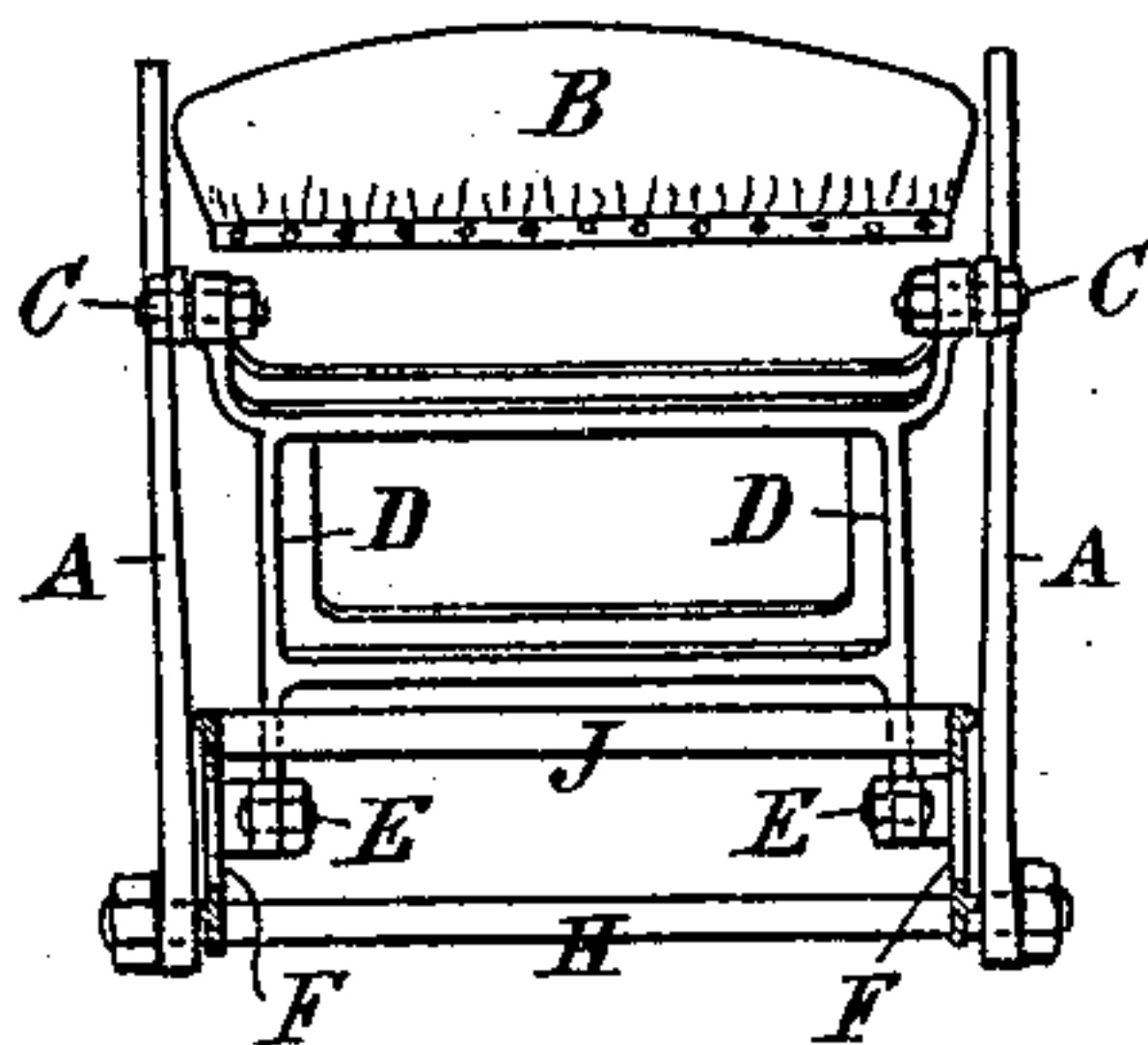
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

B. W. Miller.

L. A. Bullock.

Inventors

Thomas H. Gardner

Edward Gardner

By *Thos. H. Wright*  
Baldwin, Davidson & Wright.

# UNITED STATES PATENT OFFICE.

THOMAS H. GARDNER AND EDWARD GARDNER, OF MANCHESTER, ENGLAND.

## ADJUSTABLE FOOT-BOARD.

SPECIFICATION forming part of Letters Patent No. 547,517, dated October 8, 1895.

Application filed July 19, 1895. Serial No. 556,521. (No model.)

*To all whom it may concern:*

Be it known that we, THOMAS HARRY GARDNER and EDWARD GARDNER, engineers, subjects of the Queen of Great Britain, residing at Cornbrook, Manchester, England, have invented certain new and useful Improvements in Adjustable Foot - Boards for Dental or other Chairs, of which the following is a specification.

The drawings hereunto annexed show a dental chair fitted with an adjustable foot-board according to our invention.

The object of the invention is to provide a simple and efficient means for enabling the foot-board of a dental or other chair to be locked at any desired depth or distance below the seat to suit chair occupants of varying length of limbs, and at the same time to bring the front sloping portion of the foot-board nearer to the seat when the foot-board is raised or move it away from the seat as the foot-board is lowered.

Figure 1 is a side elevation of the chair with the foot-board in its most extended position. Fig. 2 is a similar side elevation with the foot-board drawn in and raised. Fig. 3 is a section taken through the line *a b*, Fig. 2.

The two portions J and K of the foot-board are secured to side arms F, one foot-board J a horizontal one, the other K inclining upward. The said arms F at one end are pivoted to a swinging frame D, which is pivoted at C to the front portion of the two sides of the frame A of the chair. The side arms F are curved on their under sides and each is provided with a series of notches G. These notches, it will be observed, are arranged in arcs, and these arcs correspond with the arc described by the swinging frame.

H is a fixed bar extending across from the lower part of the front of one side of the chair-frame to the other. This portion of the chair extends forward to some distance in front of the seat B, so that the bar H is some distance in front of the pivots upon which the frame D swings. The side arms F rest on the bar

H, and the bar enters one or other of the notches G on their under sides. The form of the notches is such that when the bar H lies in them the arms and foot-boards carried by the arms cannot move forward away from or backward toward the seat. The notches are all made parallel with one another, so that in whatever position the foot-boards are placed the notches always engage with the bar H in the same way.

If the front end of the arms F is raised until the notches G are disengaged from the bar H, the arms and foot-boards can be drawn forward or pushed back, as required, and be then again lowered, so that other notches in the arms then again engage with the bar; but so long as the bar H is in one or other of the notches all the parts are securely locked. The inclined foot-board K can thus be set nearer to or farther away from the seat, and as the inclined foot-board is brought nearer to the seat the horizontal foot-board is simultaneously raised, and whether raised or lowered is always held approximately in a horizontal position and held securely.

What we claim is—

The combination with the chair frame of a swinging frame jointed thereto, the foot-board, the side bars on which the foot-board is mounted and each of which is formed on its under side with a series of notches ranged in the arc of a circle, corresponding approximately with the arc described by the lower end of the swinging frame, and a horizontal cross bar secured to a forwardly projecting portion of the chair frame and adapted to engage with the notches in the side bars, the organization being such that the foot-board can be set nearer to or farther away from the seat and simultaneously raised and lowered while always maintaining a horizontal position.

T. H. GARDNER.

EDWARD GARDNER.

Witnesses:

MARK HOWARTH,  
S. E. KIRK.