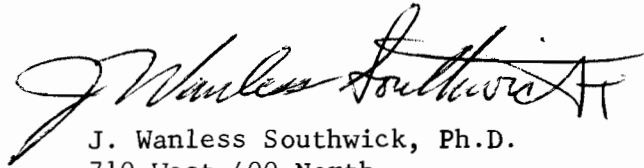


RECORD OF INVENTION

On the inside pages is a drawing and description of my invention which I call a LED TEACHING AID. Below are the signatures and addresses of two witnesses who examined the drawings, the description, and a working model of my invention and who understand its construction and use.

Date 17 May 1973



J. Wanless Southwick, Ph.D.
710 West 400 North
West Bountiful, Utah 84087

TO WHOM IT MAY CONCERN

BE IT KNOWN that J. Wanless Southwick has this 17 day of May, 1973, disclosed to us the invention which is described and illustrated in this Record of Invention. He calls his invention a LED TEACHING AID, and has shown us a working model. We fully understand its construction, purpose and use.

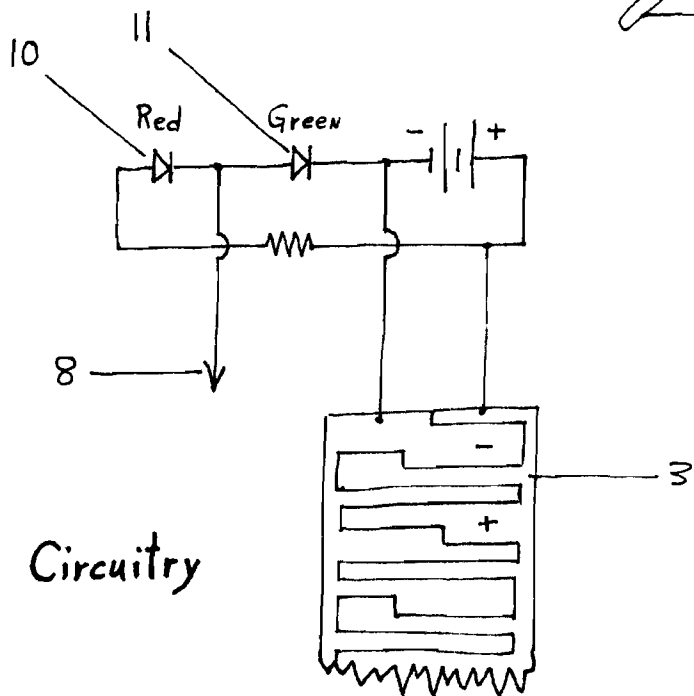
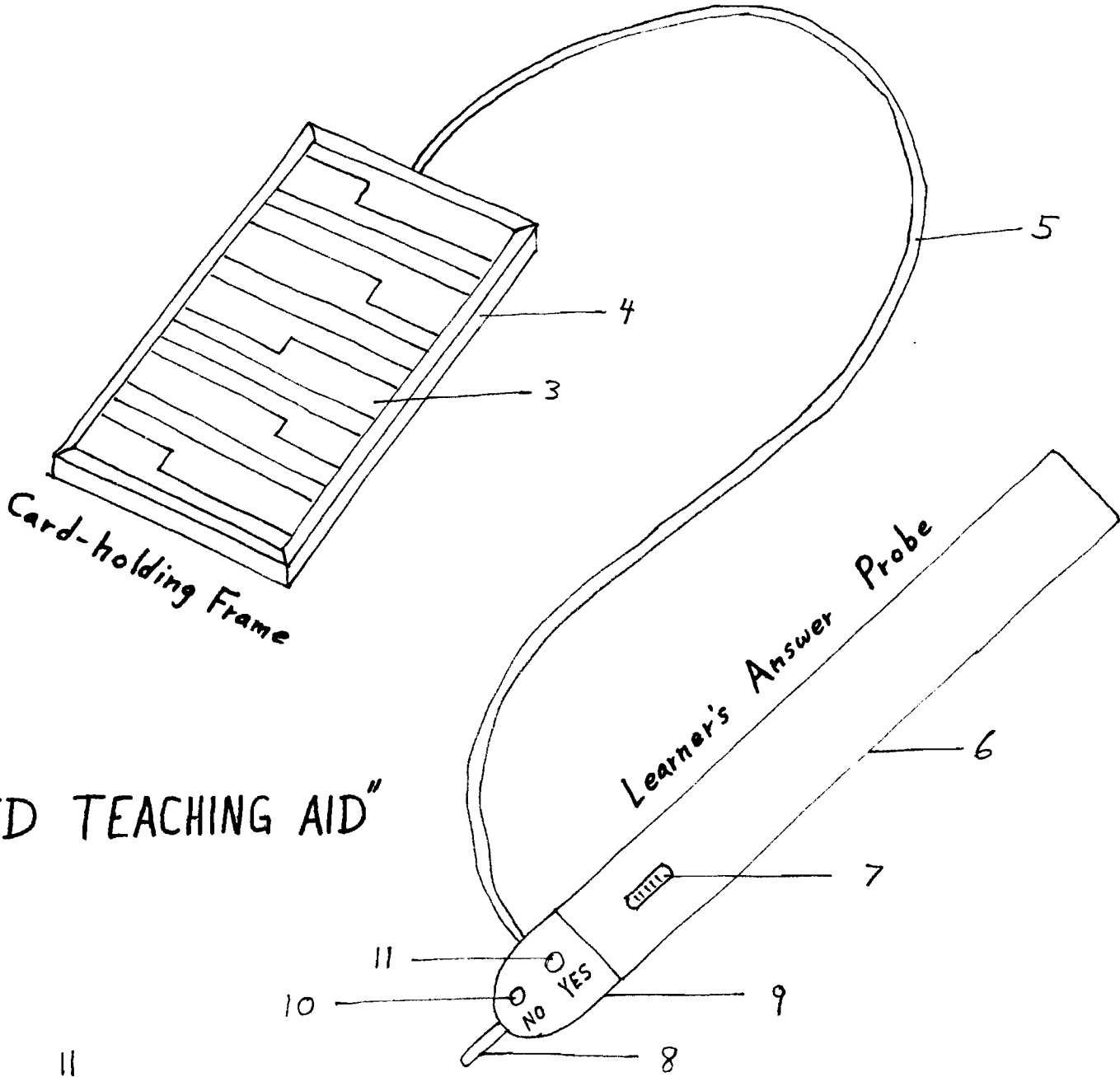
Witness: Dennis R Dalley

Address 10543 So. 700 East, Sandy, Utah 84084

Witness: Keith R. Jensen

Address 1140 West 400 No West Bountiful

"LED TEACHING AID"



INTRODUCTION

The device pictured on the left adjoining page, I call a "LED Teaching Aid." It is designed to assist the teacher by giving the learner a programed learning activity which can be used independently.

MECHANICS OF OPERATION

The material to be learned is displayed on a series of cards (1) with holes (2) punched in appropriate locations. The placement of the holes is directly related to the configuration of the circuit board (3) overwhich the card is placed during the learning activity. A frame (4) holds the card in proper position.

The circuit board is connected electrically (5) with a probe which the learner uses to make his choices on the learning cards. The probe consists of a battery case (6) which holds two penlite-type batteries, an on-off switch (7) a probe tip (8) for making electrical contact with the circuit board (3) and a LED module (9).

The LED module (9) houses a red LED (10) (light-emitting-device) and a green LED (11) connected in a circuit as shown to the batteries in the battery case (6) and the circuit board (3). The LED circuitry is designed so when the probe tip (8) is touched to the positively charged portion of the circuit board (3), the green LED (11) lights up. When the negatively charged portion of the circuit board is touched, the red LED (10) lights up.

The circuit board (3) pattern could take a multitude of forms. The form pictured is a series of strips of varying widths with alternating charges (positive or negative). Another form of circuit board might be a randomized design of spots the size of the punched holes. Whatever the pattern used on the circuit board, it should allow the teacher to choose a multitude of ways to arrange answers to questions on the learning cards.

An electronic counter could easily be built into the "LED Teaching Aid" to record the number of right and wrong responses made by the learner.

CONCEPT OF IMPLEMENTATION

The material to be learned is displayed to the learner on cards. The learner responds to the display by using the probe to choose between possible answers. He receives immediate knowledge of the correctness of his choices by either a green light signifying a right choice or a red light signifying a wrong choice. The pace at which the learner progresses is controlled solely by the learner's speed.

The results of the learner's activity may be recorded by an electronic counter. The teacher could check the learner's success by noting the number of correct responses possible in the deck of programed cards used, compared to the number of right and wrong responses made by the learner.

The library of such a system could have a large capacity, limited only by the programing capability. The system is highly adaptable to specific needs. Basic concept programs could be mass produced. The system is simple enough that the individual teacher could produce programed cards effectively to emphasize special areas. Valuable application of the "LED Teaching Aid" may be found with deaf students or with retarded children. While the "LED Teaching Aid" can be used effectively with preschool children, it can be programed with questions that challenge the skill of a college student.

Date: 17 May 1973

Inventor: J. W. Less Southworth

Date: 17 May 1973

Witness: Dennis D. Dalley

Date: 17 May 1973

Witness: J. South. K. Jensen

Alternate Circuit Board Pattern for
LED Teaching Aid

JMS

