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 AUTOMATIC COMPUTING DEVICE AND CASH DRAWER.
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978,950.

Patented Dec. 20, 1910.

Fig. 1.

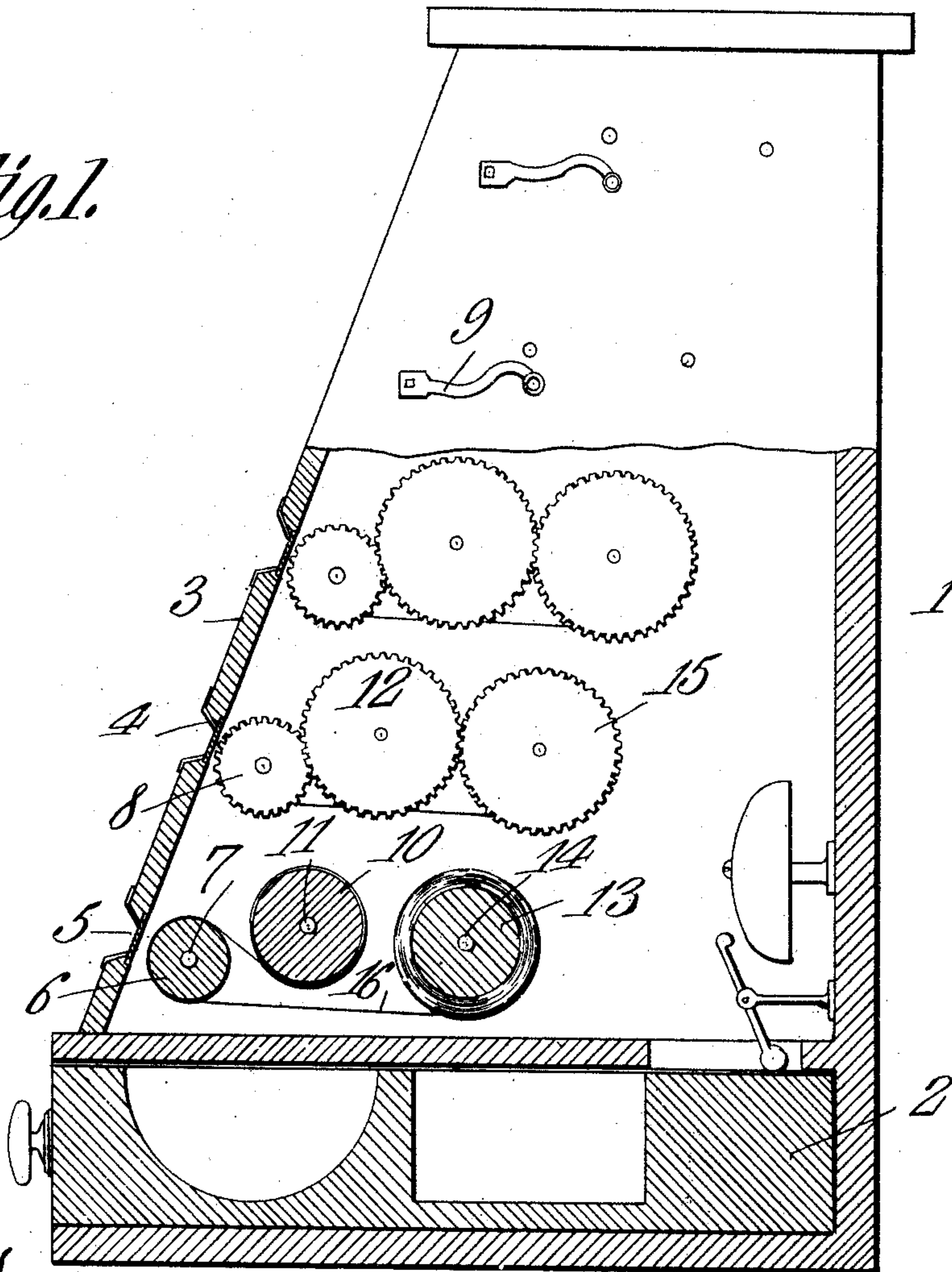
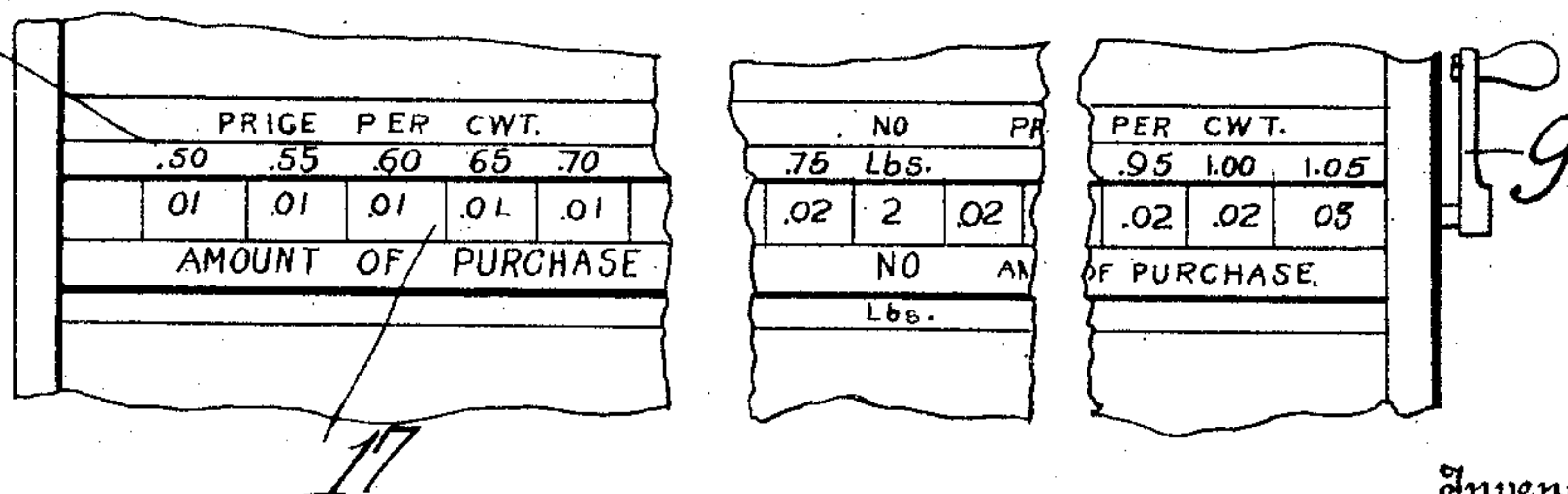


Fig. 2.



Witnesses

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AUTOMATIC COMPUTING DEVICE AND CASH-DRAWER.

978,950.

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To all whom it may concern:

Be it known that I, WALTER SHERWOOD, a citizen of the United States, residing at Canon City, in the county of Fremont and State of Colorado, have invented a new and useful Automatic Computing Device and Cash-Drawer, of which the following is a specification.

This invention has reference to improvements in automatic computing devices and cash drawers and is designed to indicate the price per unit or number of units at a given price per multiple of the unit so that no mental effort is required to ascertain the price of the articles sold.

In accordance with the present invention the cash drawer is located in the base of a suitable cabinet on one face of which are orifices through which may be exposed a circumscribed portion of a band having unit values displayed thereon, while along the margins of the orifices are indicated the prices of the larger or multiple unit and at an appropriate point in each band there is provided a space or column indicating the character and number of units agreeable to the values displayed in other columns on the same band.

The cabinet may contain from one to any desired number of bands for ascertaining the price per unit or number of units less than the predetermined multiple unit or different kind of multiple units.

The invention will be best understood from a consideration of the following detail description taken in connection with the accompanying drawings forming a part of this specification, in which drawings,

Figure 1 is an end elevation partially in section of a cabinet embodying the present invention. Fig. 2 is a front elevation of one of the display orifices extending along the drawer side of the cabinet.

Referring to the drawings there is shown a casing 1 having its upper portion constructed to receive a drawer 2 which may be of the type usually employed in connection with cash receptacles, while for convenience of observation the front of the cabinet may be in the form of an inclined partition 3 through which is formed a number of spaced parallel narrow orifices 4 elongated in the direction of the length of the cabinet.

Located immediately behind each orifice 4, which latter may be closed with a transparent covering 5 at the back, is a roller 6

having a journal 7 mounted in the sides of the cabinet and at one end, or at both ends if so desired the roller 6 carries a gear wheel 8, while the journal or shaft 7 extends through one end of the casing and there carries a crank 9 by means of which the roller may be readily rotated in either direction.

Adjacent to the roller 6 is another roller 10 having a journal 11 provided with bearings in the ends of the casing and at one or both ends of this journal there is a gear wheel 12 meshing with the gear wheel 8 on the roller 6.

At an appropriate point within the casing and more remote from the roller 6 than is the roller 10, is another roller 13 having a journal or shaft 14 mounted in the ends of the casing and this roller 13 has secured thereto or to its shaft 14 at one or both ends a gear wheel 15 in mesh with the gear wheel 12 of the roller 10.

A band 16 extends from the roller 10 to the roller 13, being first carried around the roller 6 and on this band are columns of figures indicated at 17 in Fig. 2, the arrangement being such that these columns of figures are visible through the orifices 4, being brought by the roller 6 close to the transparent plate 5.

The walls of the orifices 4 may flare outwardly and these walls have imprinted thereon or carrying strips having suitable legends printed thereon, as indicated at 18, these legends indicating the prices per multiple of units decided upon, properly spaced to agree with the columns on the respective bands 16.

At some point, preferably an intermediate point in the band there is a column indicating the unit and on the strip 18 in each orifice is at this point a designation of the character of the unit.

There may be as many sets of rollers each with a band 16, housed within the casing 1 as may be necessary or convenient and each set of rollers may be independent of every other set, each set of rollers being under the control of an individual crank 9.

In the specific example shown in the drawings, it is assumed that the prices are per hundredweight and that the units are pounds. Under these circumstances the unit column of the band will show from one pound to ninety-nine pounds or any other arrangement desired, while the price per

hundredweight will be given on the strip 18, this strip being long enough to indicate numerous different prices per hundredweight. There will be as many columns on the band 16 longitudinal thereto as there are prices per hundredweight and in each column opposite or in line with the unit indication so as to match each and every one of the hundredweight prices will be numbers indicating the price per unit at the hundredweight price.

By providing a suitable number of bands 16 with carrying rollers and corresponding orifices 4 the device may be made to indicate at a glance, prices per hundredweight, per ton, per bushel, per yard, or any other designation desired.

Since the rollers 6, 10 and 13 are interconnected through the gear wheels 8, 12 and 15 any motion imparted to the roller 6 through its crank 9 will be transmitted to the rollers 10 and 13, but the said rollers 10 and 13 will turn in opposite directions, one rolling the band 16 thereon, while the other is unrolling it therefrom. If the band be in sufficiently taut condition initially it will retain this condition at all times because of the uniformity of movement of the several rollers.

Suppose that some article sells for 75 cents per hundredweight and that it be desirable to find the price of two pounds of the article at such a price per hundredweight. The appropriate one of the cranks 9 is rotated by the operator until the band controlled thereby has the article designation 2 brought into sight through the corresponding orifice 4. By glancing along the orifice until the hundredweight designation of 75 cents is seen it will be found that on the band beneath the said designation of 75 cents there will be displayed the designation of two cents which will be the price for two pounds at 75 cents per hundred pounds. Other amounts are found with equal ease and much mental effort is avoided especially in complex conditions, the example given being merely illustrative.

What is claimed is:

1. A computing device comprising drums

positively connected for rotation in opposite directions, a flexible band wound upon and extending from drum to drum, a roller positively connected to the said drums for imparting rotative movement thereto, said roller being traversed by the band, and a casing having orifices each longitudinal to the roller, the band having designations thereon indicating units and prices, any one unit or multiple thereof with the prices therefor being visible through the orifice.

2. An automatic computing device comprising a suitable cabinet having orifices there-through each with a fixed price scale displayed on one wall thereof, and a means for displaying the prices of various units of the larger prices shown at the margins of the orifices, comprising a flexible band containing columns of prices and a column of units, a roller adjacent to the orifice and underlying the band, a drum receiving one end of the band, another drum receiving the other end of the band, and gearing connecting the roller and drums for simultaneous positive rotation.

3. A device of the character described comprising a suitable casing, a money receptacle in the base thereof, said casing having on one face a series of parallel orifices extending across said face and each provided with price indications for large units, a flexible band for each orifice mounted interior to the casing and containing in transverse rows small unit indications and prices per unit based on the larger unit prices, a roller within the casing adjacent to each orifice and traversed by the band, spaced drums for the respective ends of the band and interconnecting gearings between the roller and the band receiving drums, the said band being operable from the exterior of the casing.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WALTER SHERWOOD.

Witnesses:

J. J. LEWIS,
D. W. ROOS.