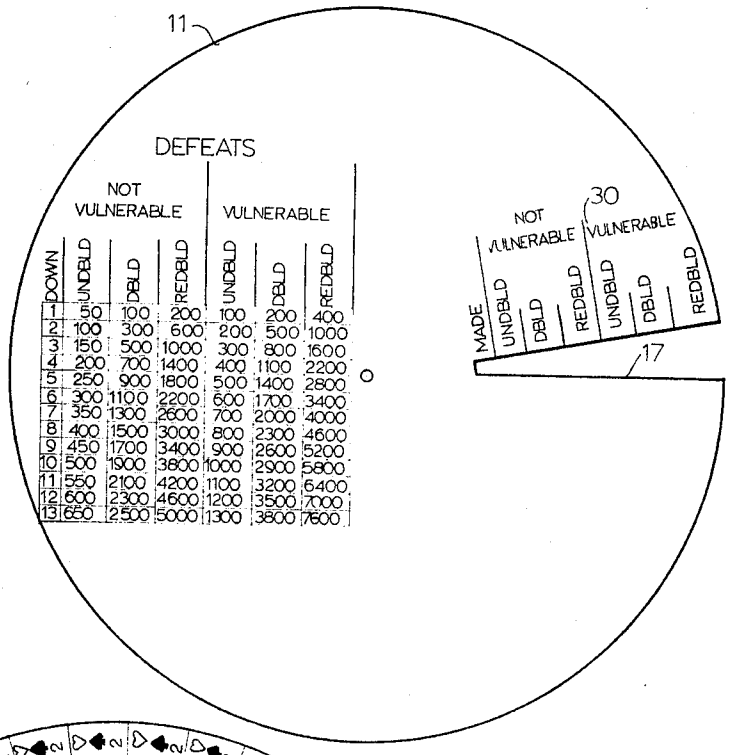
Oct. 25, 1966 J. C. ROBINSON, JR 3,280,788

DUPLICATE BRIDGE-SCORING DEVICE

Filed July 27, 1965 3 Sheets-Sheet 1

FIG. 1



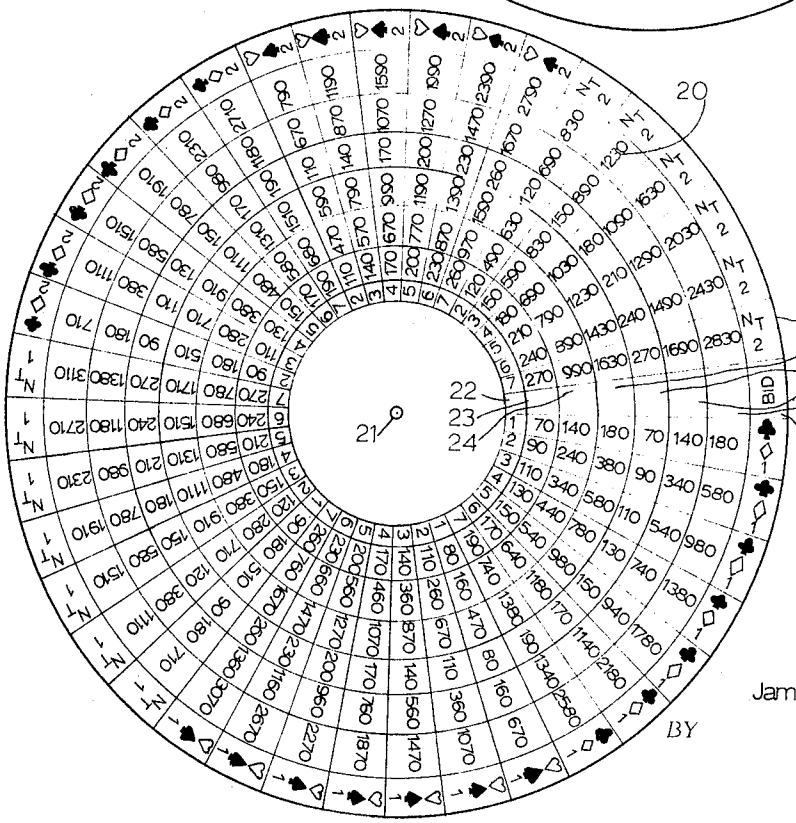


FIG. 2

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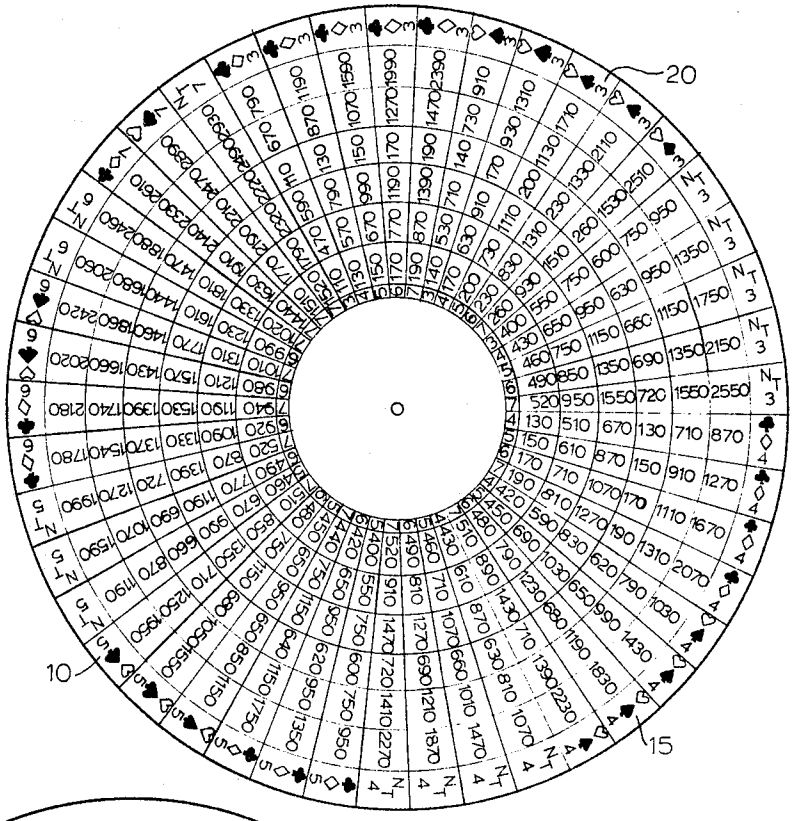
3,280,788

DUPLICATE BRIDGE-SCORING DEVICE

Filed July 27, 1965

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FIG. 3



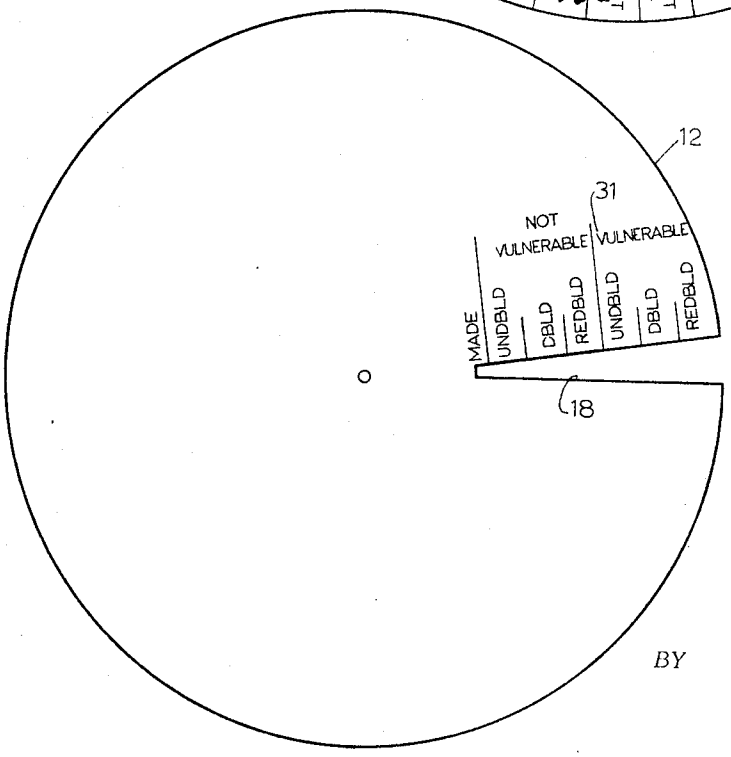


FIG. 4

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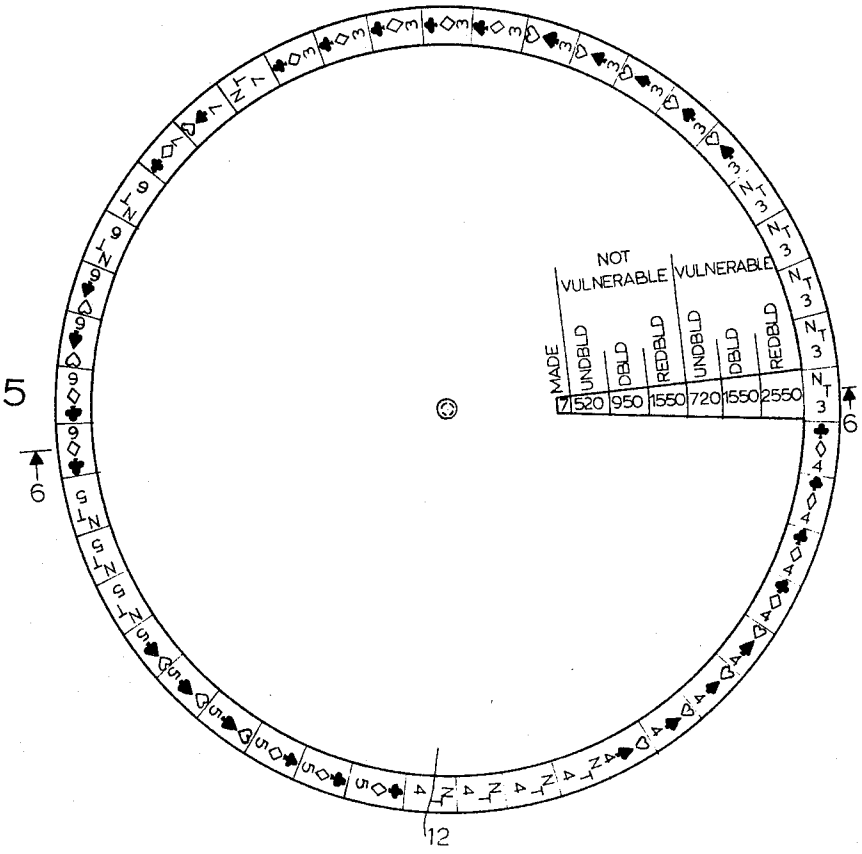
3,280,788

DUPLICATE BRIDGE-SCORING DEVICE

Filed July 27, 1965

3 Sheets-Sheet 3

FIG. 5



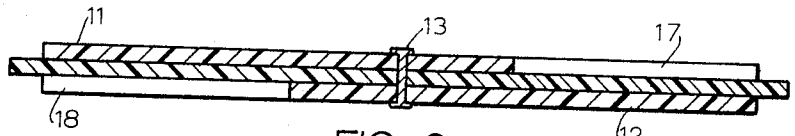


FIG. 6

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DUPLICATE BRIDGE-SCORING DEVICE

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Filed July 27, 1965, Ser. No. 475,118
1 Claim. (Cl. 116—120)

The present invention relates to a duplicate bridge scoring device and, more particularly, to a device for instantly determining the score of a completed hand of duplicate bridge whether the contract has been made or defeated.

For the beginner, the scoring of regular contract bridge is as complicated as playing the game itself; however, there are certain rules which make the scoring of contract bridge relatively simple for it advances substantially in an arithmetic progression. The scoring of duplicate bridge may not be so easily determined because the arithmetic progression continues only for bids less than game and for defeated bids. Furthermore, the similarities between duplicate bridge and regular contract bridge in the scoring thereof extend only to the defeats which may easily be calculated by arithmetic progression. The scoring of duplicate bridge severely taxes the memory and some means for easily calculating the same is a recognized need in the art.

Therefore, an object of this invention is to provide a duplicate bridge scoring device for computing the score of a hand of duplicate bridge whether the same was made or set.

Another object of the present invention is to provide a duplicate bridge scoring device which is operable to show the score of any bid made or any bid set by the manipulation of a simple mechanical expedient.

A further object of the present invention is to provide a duplicate bridge scoring device with a plurality of concentrically arranged circular discs having the necessary scoring indicia and with each being rotatable relative to the other.

A still further object of the present invention is to provide a duplicate bridge scoring device with a circular indicator disc which encompasses only the scores which are obtainable by the making of a predetermined contract.

Further objects and a more complete understanding of the invention may be obtained by referring to the following description and claims taken in conjunction with the accompanying drawings which shown an illustrative embodiment of the construction forming the base of the invention and in which:

FIGURE 1 is a plan view of the exposed surface of the first indicator disc;

FIGURE 2 is a plan view of one side of the scoring plate;

FIGURE 3 is a plan view of the other side of the scoring plate;

FIGURE 4 is a plan view of the exposed surface of the second indicating disc;

FIGURE 5 is a plan view of the second indicating disc having been mounted on the scoring plate and showing the possible scores for a three no-trump bid with the contracting party making seven; and

FIGURE 6 is a sectional view taken along lines **6—6** of FIGURE 5 showing the radially extending slots.

Before describing in detail the structure of the device and the relationship of the indicia thereon, a general explanation of the pertinent factors and of the meaning of the terms used herein will be given to facilitate an understanding of the invention.

The scoring of duplicate bridge is divided into two main categories and they are the bids which have been made and the bids which have been set or defeated. The scoring of defeated bids is relatively simple and the

scores may be arranged in tabular form. The number of tricks set or down is determined by subtracting the number of tricks taken by the contracting party from the number of tricks bid plus book, book being six tricks. The score is the same for any selected suit but is increased when the bid has been doubled, redoubled and/or when the contracting party is vulnerable. Since the variables in the scoring of defeated bids are few, they may be easily arranged in tabular form. The arrangement of the scores in tabular form when the contract has been made would be much more difficult for there are eighty-four different combinations of bids made taken in conjunction with tricks contracted for. There are six possible scores under each combination of tricks contracted for and tricks taken in that the contract may have been not vulnerable and undoubled, not vulnerable and doubled, and not vulnerable and redoubled; also, it may have been vulnerable and undoubled, vulnerable and doubled, and vulnerable and redoubled. Therefore, when a bid has been mad there are 504 possible scores. This is assuming that hearts and spades have equivalent scores for the same bid as do clubs and diamonds. These scores are circumferentially and radially arranged about a center point on both sides of a flat scoring plate.

For the purpose of this description and to facilitate an understanding thereof, the following terms shall have the meanings stated. A trick consists of four cards, one from each player's hand having been taken by the winner thereof; there are 13 possible tricks. The term "made" as used in FIGURE 5 denotes the number of tricks made above six, six tricks being a book with the counting starting from that point. The term "bid" as shown in FIGURE 2 denotes the number of tricks bid above six. The term "down" is the number of tricks by which the bidding or contracting party failed to make his bid, this being calculated by adding the number of tricks bid to book and subtracting the number of tricks taken therefrom. Each bid made by a proponent initially is undoubled; however, this bid may be doubled by the opponent and in turn may be redoubled by the proponent. All bids are made while the player is either vulnerable or not vulnerable and in duplicate bridge, this is predetermined before each hand for that hand.

A preferred embodiment of this invention includes a flat scoring plate **10** having indicia on each side thereof, a first circular indicator disc **11** and a second circular disc **12**, said indicator discs **11** and **12** being axially aligned and rotatably mounted on scoring plate **10** by means of a pin **13**. Scoring plate **10** includes indicia **20** which are radially aligned with a center **21**. Indicia **20** are circumferentially arranged into concentric groups **22**, **23**, **24**, **25**, **26**, **27**, **28** and **29** which correspond respectively to the number of tricks made above book, the score for being not vulnerable and undoubled, the score for being not vulnerable and doubled, the score for being not vulnerable and redoubled, the score for being vulnerable and undoubled, the score for being vulnerable and doubled, the score being vulnerable and redoubled, and the suit and number of tricks bid. Given a predetermined bid, indicia **20** in radial alignment indicate all possible scores obtainable by the making of a certain number of tricks above book. It is to be noted that the scores occupy both sides of the scoring plate **10**; however, this invention includes the placement of all scoring indicia on one side of scoring plate **10**.

First circular disc **11** and second circular disc **12** are each provided with a radially extending slot **17** and **18**, respectively. Slots **17** and **18** are adapted to encompass the score and the number of tricks made above book for each radially aligned block of indicia. To facilitate the instant sighting of the bid, indicating discs **11** and **12** extend radially only up to but not including bid group **29**.

It may easily be seen that the indicating discs may cover the bid group **29**. Indicating discs **11** and **12** are provided with indicia **30** and **31** respectively, which are adjacent the slots so that each circumferential group of numbers appearing on score plate **10** is defined by the indicia on plates **11** and **12**. Indicating disc **11** also includes on the surface thereof indicia for determining the score of a set bid or a defeated contract. The score of the set bid is arranged in tabular form whereby the score is determined by locating the number of tricks by which the bidding party went down which is the same as the number of tricks set, and reading laterally across and under the predetermined state of the contract.

Problem: In duplicate bridge, find the score of a completed contract for the following conditions: The contracting party bid four spades and made seven spades, that is, took seven tricks after having made a book; the contracting party was not vulnerable and the bid was redoubled.

Solution: First, the bid of four spades is located on side **15** of scoring plate **10**. It is noted that hearts and spades are in the same radial block for hearts and spades have the same value. Secondly, slot **18** of disc **12** is rotatably moved into a position whereby slot **18** substantially envelops a radially extending block of a bid of four spades. It is noted that there are four such radially extending blocks; therefore, to determine the proper one, slot **18** is moved to enclose the number seven within that block which is read from the tricks made. Thirdly, after having properly selected the radially extending block, the score is read from the indicia denoting the proper state of the contract, which in this case was not vulnerable and redoubled and the score thereof is 1430. To determine the score of any completed and made contract, this same procedure is repeated.

Where the contract has been set by the opponent, the score is determined by looking at the tabular column under defeats, as outlined above.

While I have set forth my invention in considerable detail for purposes of illustrating one embodiment thereof, it will be understood by those skilled in the art that many of these details may be varied without departing from the spirit and scope of the invention.

I claim:

A duplicate bridge-scoring device comprising a flat circular scoring plate having a set of indicia on opposite sides thereof, each said set of indicia being arranged in the form of radial rows made up of circularly aligned indicia blocks, within each radial row the radial innermost of said indicia blocks having the number of possible tricks made, the radially outermost of said indicia blocks having a possible corresponding bid and the intermediate blocks having all of the possible scores for such combination of tricks made and bid; a pair of flat circular indicator discs mounted on opposite sides of said scoring plate and arranged for independent rotation about the axis thereof, the diameter of each said disc being less than the diameter of said plate and being arranged so that the outermost of said indicia blocks are constantly exposed on both sides of said plate, each said disc having a radial slot adapted to envelop one of said radial rows and along one edge of said slot a further set of indicia providing for the innermost block of the row enveloped by said slot the legend "made" corresponding to the number of tricks made, in successive radial sequence a further "not vulnerable" legend group including "undoubled, "doubled" and "redoubled" and in further successive radial sequence a legend "vulnerable" group including the same legends as in the "not vulnerable" group, the location of said "not vulnerable" and "vulnerable" legends and the location of said possible scores in said blocks being such that when the appropriate slot of the appropriate disc is aligned with the particular row having the desired combination of the number of tricks made and bid, the scores in said particular row are aligned with the corresponding one of said "not vulnerable" and "vulnerable" legends.

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