

June 19, 1923.

1,459,331

E. R. HERING

MEANS EMPLOYED IN BOOKKEEPING

Filed Aug. 9, 1919

2 Sheets-Sheet 1

1742 A

C \$1.00 CLASS

D NAME _____

I ADDRESS _____

WEEKS PAST DUE					WEEKS PAST DUE							
5	4	3	2	1	5	4	3	2	1			
No. of	AMT.				DATE PAID	TOTAL	No. of	AMT.			DATE PAID	TOTAL
1st	1.00				Dec. 28	1.00	26th	1.00				26.00
2nd	1.00				Jan. 18	2.00	27th	1.00				27.00
3rd	1.00				Jan. 18	3.00	28th	1.00				28.00
4th	1.00				Jan. 18	4.00	29th	1.00				29.00
5th	1.00				Jan. 24	5.00	30th	1.00				30.00
6th	1.00				Feb. 7	6.00	31st	1.00				31.00
7th	1.00				Feb. 9	7.00	32nd	1.00				32.00
8th	1.00					8.00	33rd	1.00				33.00
9th	1.00					9.00	34th	1.00				34.00
10th	1.00					10.00	35th	1.00				35.00
11th	1.00					11.00	36th	1.00				36.00
12th	1.00					12.00	37th	1.00				37.00
13th	1.00					13.00	38th	1.00				38.00
14th	1.00					14.00	39th	1.00				39.00
15th	1.00					15.00	40th	1.00				40.00
16th	1.00					16.00	41st	1.00				41.00
17th	1.00					17.00	42nd	1.00				42.00
18th	1.00					18.00	43rd	1.00				43.00
19th	1.00					19.00	44th	1.00				44.00
20th	1.00					20.00	45th	1.00				45.00
21st	1.00					21.00	46th	1.00				46.00
22nd	1.00					22.00	47th	1.00				47.00
23rd	1.00					23.00	48th	1.00				48.00
24th	1.00					24.00	49th	1.00				49.00
25th	1.00					25.00	50th	1.00				50.00

N

NOTE: All dates are posted in Column printed "DATE PAID". The payments made when due or before should be posted over to the right, if payment is one week past due post a little to the left so beginning of date comes under figure 1. Two weeks past due is posted more to the left under Column 2 etc. This will show at any time number of payments past due, and TIME

L TOTAL PAYMENTS \$50.00

M INTEREST \$

DRAW CHECK FOR \$

Fig. 1

Inventor
E. R. Hering

By Karl Luning
his Attorney

June 19, 1923.

1,459,331

E. R. HERING

MEANS EMPLOYED IN BOOKKEEPING

Filed Aug. 9, 1919

2 Sheets-Sheet 2

35210									
DUE WEEK OF	PAID PAST DUE	TOTAL PAID	TOTAL PAID	THE CHRISTMAS MONEY CLUB, 1916	DIVISION 200	TOTAL PAID	PAID PAST DUE	TOTAL PAID	DUE WEEK OF
27 DEC	0	2.00	2.00			2.00	0	2.00	19
3	0	2.00	4.00			2.00	0	2.00	26
10	0	2.00	6.00			2.00	0	2.00	3
17	0	2.00	8.00			2.00	0	2.00	10
24	0	2.00	10.00			2.00	0	2.00	17
31	0	2.00	12.00			2.00	0	2.00	24
7	0	2.00	14.00			2.00	0	2.00	31
14	0	2.00	16.00			2.00	0	2.00	7
21	0	2.00	18.00			2.00	0	2.00	14
28	0	2.00	20.00			2.00	0	2.00	21
6	0	2.00	22.00			2.00	0	2.00	28
13	0	2.00	24.00			2.00	0	2.00	4
20	0	2.00	26.00			2.00	0	2.00	11
27	0	2.00	28.00			2.00	0	2.00	18
3	0	2.00	30.00			2.00	0	2.00	25
10	0	2.00	32.00			2.00	0	2.00	2
17	0	2.00	34.00			2.00	0	2.00	9
24	0	2.00	36.00			2.00	0	2.00	16
1	0	2.00	38.00			2.00	0	2.00	23
8	0	2.00	40.00			2.00	0	2.00	30
15	0	2.00	42.00			2.00	0	2.00	6
22	0	2.00	44.00			2.00	0	2.00	13
29	0	2.00	46.00			2.00	0	2.00	20
5	0	2.00	48.00			2.00	0	2.00	27
12	0	2.00	50.00			2.00	0	2.00	DEC. 4

Y AA G W C
B' 35210
X Z BB CC DD EE FF GG HH
THE CHRISTMAS MONEY CLUB, 1916
DIVISION 200
\$100.00
GREATER CLEVELAND SAVINGS BANK
OHIO

D V Fig. 2

35210									
DUE WEEK OF	PAID PAST DUE	TOTAL PAID	TOTAL PAID	THE CHRISTMAS MONEY CLUB, 1916	DIVISION 200	TOTAL PAID	PAID PAST DUE	TOTAL PAID	DUE WEEK OF
27 DEC	0	2.00	2.00			2.00	0	2.00	19
3	0	2.00	4.00			2.00	0	2.00	26
10	0	2.00	6.00			2.00	0	2.00	3
17	0	2.00	8.00			2.00	0	2.00	10
24	0	2.00	10.00			2.00	0	2.00	17
31	0	2.00	12.00			2.00	0	2.00	24
7	0	2.00	14.00			2.00	0	2.00	31
14	0	2.00	16.00			2.00	0	2.00	7
21	0	2.00	18.00			2.00	0	2.00	14
28	0	2.00	20.00			2.00	0	2.00	21
6	0	2.00	22.00			2.00	0	2.00	28
13	0	2.00	24.00			2.00	0	2.00	4
20	0	2.00	26.00			2.00	0	2.00	11
27	0	2.00	28.00			2.00	0	2.00	18
3	0	2.00	30.00			2.00	0	2.00	25
10	0	2.00	32.00			2.00	0	2.00	2
17	0	2.00	34.00			2.00	0	2.00	9
24	0	2.00	36.00			2.00	0	2.00	16
1	0	2.00	38.00			2.00	0	2.00	23
8	0	2.00	40.00			2.00	0	2.00	30
15	0	2.00	42.00			2.00	0	2.00	6
22	0	2.00	44.00			2.00	0	2.00	13
29	0	2.00	46.00			2.00	0	2.00	20
5	0	2.00	48.00			2.00	0	2.00	27
12	0	2.00	50.00			2.00	0	2.00	DEC. 4

Y AA G W C
B' 35210
X Z BB CC DD EE FF GG HH
THE CHRISTMAS MONEY CLUB, 1916
DIVISION 200
\$100.00
GREATER CLEVELAND SAVINGS BANK
OHIO

D V Fig. 3

Inventor

Patented June 19, 1923.

1,459,331

UNITED STATES PATENT OFFICE.

EMIL R. HERING, OF CLEVELAND, OHIO.

MEANS EMPLOYED IN BOOKKEEPING.

Application filed August 9, 1919. Serial No. 316,283.

To all whom it may concern:

Be it known that I, EMIL R. HERING, a citizen of the United States, residing at the city of Cleveland, in the State of Ohio, have invented certain new and useful Improvements in Means Employed in Bookkeeping, of which the following is a specification.

My invention relates particularly to bookkeeping done in banks and other similar institutions in connection with transactions in which payments are to be made at stated intervals. In such transactions it is desirable and frequently essential to determine after all the payments have been made whether they have been made in due season or whether there has been delay in making some or all of the required payments.

One of the common schemes of this sort is frequently referred to as the Christmas Money Club. In this scheme, to which I will apply my invention as a specific example, the customer, purchaser or depositor is required to make payments to the bank or other receiving institution at definite periods during the year. Payments may be made weekly or monthly or at other intervals. The payments may all be of the same amount or each payment may be larger than the preceding payment or they may vary in other respects. Whatever character the transactions have their details are generally definitely determined at the beginning of the period. For instance one common scheme contemplates the payment into the bank of \$1.00 each week for fifty weeks beginning with the last week in December and running to about Christmas time of the next year when the total of the payments together with interest is to be returned to the depositor. One purpose of such a scheme is to inculcate in the depositor habits of regularity in saving and in paying. Another reason for requiring the conditions to be exactly met is that the money must be received by the bank at the appointed time in order to warrant the bank paying interest on the amount. To this end it is desirable if not essential that there be provided in the bank means for recording the payment as made in such a way as to indicate whether the payment is made when due irrespective of whether the date is recorded. Of course if the date of each payment is recorded by the bank the record may be examined and so the timeliness of the pay-

ments determined. In a large institution having many accounts the careful examination of a multiplicity of payment dates at the maturity of the account is a very considerable inconvenience. One purpose of the present invention is to provide means for readily indicating in a characteristic manner easily observed the condition of each payment as made as to whether it is made prior to or after its due date. As a matter of added convenience I may provide means to indicate the actual date each payment is made and if it is in arrears to indicate how much time it may be overdue in such a way as to be readily discernible.

In the accompanying drawings I have shown specific embodiments of my invention. Figure 1 shows a record card to be used in a bank in connection with an account which employs one of the usual or any preferred form of coupon book. Fig. 2 shows a simplified card to be held at the bank and Fig. 3 shows a card to be employed by the depositor in connection with the card of Fig. 2.

The card shown in Fig. 1 is adapted for vertical filing in the bookkeeping cabinet at the bank and to this end has a tab A projecting above its top on which may be entered the serial number of the account. The main body of the card B carries a mark C to indicate the class of the account. In the present instance the marking "\$1.00 Class" indicates that each payment is to be \$1.00. Below this are lines D for the name and address of the depositor and below this columns indicating the number of the payment E, the amount due on that payment F and the total amount including that payment G. Between the column indicating the amount due and the column indicating the total paid is a column H headed "Date paid" in which is to be stamped the date on which the payment is made. To the left of the "Date paid" column are a suitable number of rulings five being shown in the present instance. Above the legend "Date paid" is an arrow I associated with the words "Weeks past due." The arrow points to and indicates a series of numbers K; "1" being between the first pair of rulings to the left of the legend "Date paid"; "2" between the second and third rulings; "3" between the third and fourth rulings; "4" between the fourth and fifth rulings; "5" between the fifth ruling and the edge of the card. In addition

to this at the lower right hand corner of the card is an indication L of the total of the payments made and a blank space M in which may be entered the amount of interest accrued and the amount for which a check should be drawn to settle the account. In the drawing I have shown to the left of this an instruction note N reading "All dates are posted in column printed 'Date paid'".

The payments made when due or before should be posted over to the right, if payment is one week past due post a little to the left so beginning of date comes under Figure 1. Two weeks past due is posted more to the left under column 2 etc. This will show at any time number of payments past due and time." The coupon books held by the depositor indicate the date by which each of the various payments should be made and for the series of accounts this date is well known to the bookkeeper. If the payments are made before they are overdue the date of their payment will be marked or stamped under the words "Date paid" and to the right of the rulings. If the payment is not made when due but is delayed for not exceeding one week the date when paid will be similarly marked on the card but instead of being placed under the words "Date paid" it will be placed to the left so as to cover a part of the space between the first and second rulings to the left and so show in the column headed "1" to which the "Weeks past due" arrow points. Similarly if the payment is two weeks overdue the entry date will appear in the column headed "2"; if three weeks overdue it will appear in the column headed "3"; if four weeks overdue it will appear in the column headed "4"; if five weeks overdue it will appear in the column headed "5". Any suitable number of these columns may be provided and I do not limit myself to as few as the five columns here shown nor is it essential that as many as five be employed.

For purposes of illustration I have made some entries upon the card shown in Fig. 1. It is assumed that this card is to indicate the condition of an account in which the first payment is to be made during the week beginning December 27; the second payment to be made during the week beginning January 3; the third payment to be made during the week beginning January 10; the fourth payment to be made during the week beginning January 17; the fifth payment to be made during the week beginning January 24; the sixth payment to be made during the week beginning January 31; and the seventh payment to be made during the week beginning February 7 and so on throughout the year. In the particular account recorded on the card the first payment was made on December 28. The 28th of December being within the week beginning December 27

that payment was made when due and consequently the date Dec. 28 as indicated at O is stamped in column H under the words "Date paid" and to the right of the rulings. Although the second payment was due during the week beginning January 3 and the third payment due during the week beginning January 10 those payments were not made until January 18 when \$3.00 was paid to cover the second, third and fourth payments. On January 18 the second payment was two weeks overdue so that date Jan. 18 is stamped as indicated at P beginning between the rulings under "2" to which the "Weeks past due" arrow I points. On January 18 the third payment was one week overdue and to indicate this the date Jan. 18 is so stamped at Q as to show in the column headed "1" to which the "Weeks past due" arrow I points. The fourth payment being due during the week beginning January 17 was not past due when it was paid on the 18th of January and consequently the date stamp Jan. 18 is placed at R under the words "Date paid" and to the right of the ruling. The fifth payment being due during the week of January 24, was seasonably paid on January 24 and consequently the date stamp January 24 is placed at S to the right of the ruling and under the words "Date paid". The sixth payment being due during the week of January 31 was one week past due on the 7th of February when the payment was made consequently the date Feb. 7 is so placed at T as to show between the first and second rulings to the left and under the figure "1" indicated by the "Weeks past due" arrow I. On February 9 the seventh payment was made and since this payment was due during the week beginning February 7 it was seasonably made as indicated by the date stamp Feb. 9 at U which was placed to the right of the ruling and under the words "Date paid". An inspection of this card without reference to a calendar and without reference to the specific dates of the various payments and without reference to specific dates when the various payments were due shows that one payment was made when two weeks past due; two payments were made when one week past due and four payments were made when due. This information is obtained readily and promptly by observing that there is one date mark, namely January 18 at P, which encroaches upon the column headed "2" and two dates namely Jan. 18 at Q and Feb. 7 at T which encroach upon the column headed "1" to which the "Weeks past due" arrow leads. The four dates, namely Dec. 28 at O, Jan. 18 at R, Jan. 24 at S and Feb. 9 at U which do not encroach upon the rulings to the left indicate that the four payments represented by them were made when they were not past due.

In Figures 2 and 3 I have shown another application of my invention. In this scheme I provide two cards, one shown in Fig. 2 marked "Bank card" B¹ to be held in the bank as its record. The card B² shown in Fig. 3 is given to the depositor and represents his receipts for payments. In this scheme the two cards are identical in every respect except that one has printed on it the two words "Bank card". The two cards may be superposed one on the other and the printing or marking on one will exactly overlies the corresponding marking or printing on the other. The operation of this scheme requires the depositor to present this card at the bank when he makes a payment and in order to record the payment the depositor's card is placed over the bank card and then the two are simultaneously punched preferably in a characteristic way in the proper place to indicate the payment. The particular scheme to which the specific cards of Figs. 2 and 3 relate calls for payment of two dollars each week. The card at the bottom and in the center bears the name or imprint of the bank at V and immediately above that are lines D for the name and address of the depositor above which may be printed the amount and class of the account. At the extreme top of the card a serial number W is placed for purpose of identification. The card carries a column X headed "Due week of" in which are the various dates to indicate when the payments are due. Another column G headed "Total paid" carries a series of numbers each \$2.00 larger than the one next above it to indicate the total amount due or paid in on any date. Between these I have provided two columns over which at Y is the general legend "Paid". One of these two columns Z has a sub-title "Past due" and the other AA a sub-title "When due". For convenience I have placed \$2.00 at each date in one column to indicate the amount due at that time and the other column contains merely a series of dots. Of course both columns might have numbers in them or both might have dots in them or both might be left blank although the arrangement shown is a preferred and convenient arrangement.

In Figs. 2 and 3 I have indicated payments made on the same dates as those in Fig. 1. The present card does not provide for indicating the actual date on which the payment was made but does indicate whether the payment was made when due or when past due. It is frequently sufficient to indicate that the payment is past due without indicating whether it is one, two, three or four weeks past due. When a payment is made before it is past due the two cards after being superposed are simultaneously marked, preferably by a characteristic punch of the bank, in the column

AA marked "When due" and on a line corresponding to the date on which the payment is made. When the payment is past due at the time it is made the cards will be similarly punched but in the column Z marked "Past due". The specific cards shown in Figs. 2 and 3 indicate in column X that the first payment is due during the week beginning December 27; the second payment during the week beginning January 3; the third payment during the week beginning January 10; the fourth payment during the week beginning January 17, the fifth payment during the week beginning January 24, the sixth payment during the week beginning January 31, and the seventh payment during the week beginning February 7. As indicated in Fig. 1 the first seven payments were made on the following dates respectively: December 28, January 18, January 18, January 18, January 24, February 7 and February 9. When the first payment was made the bank clerk having the cards of Figs. 2 and 3 before him observed that it was due during the week of December 27. Being only December 28 then he properly punched the first "2.00" under the column AA marked "When due" at BB. When the second, third and fourth payments were made on January 18 the bank clerk observed that the second and third payments were overdue since they were due respectively in the weeks beginning January 3 and 10. He accordingly punched the cards of Figs. 2 and 3 at CC and DD under the column Z marked "Past due" to indicate the second and third payments but the fourth payment being made within the week beginning January 17 was indicated by a punch EE under the column AA marked "When due". In like manner the fifth payment due January 24 was punched at FF in the column AA marked "When due", the sixth payment being made on February 7 which is after the week beginning January 31, is represented by a punch GG in the column Z headed "Past due", and the seventh payment made two days later but within the week beginning February 7 is indicated by a punch HH under the column AA marked "When due".

An inspection of the bank card of Fig. 2 (or of the depositor's card of Fig. 3) therefore quite readily shows in column G that \$14.00 has been paid made up of four timely payments indicated by punches BB, EE, FF, and HH in the column AA marked "When due" and three tardy payments indicated by punches CC, DD and GG in the column Z marked "Past due". Payments will proceed throughout the fifty weeks or other period before the maturity of the scheme, in each instance the timeliness or tardiness of the payment being indicated by a punch in the appropriate column. An inspection of

the card at the end of the period will readily and conclusively show by the punch mark in the "Past due" column Z the number of tardy payments so that the clerk preparing
5 to pay the bank obligation at maturity may readily determine whether the depositor has earned interest or whether the number of tardy payments has been so great as to de-
10 prive him of some or all of the interest generally paid.

My invention is not limited to the specific details illustrated in the drawings or de-

scribed in this specification and the follow-
ing claim is to be read with this understand-
ing.

15

I claim as my invention:

A credit card, an appropriately designated column thereon to receive a mark to indi-
cate a timely payment, a plurality of col-
umns adjacent thereto each appropriately
20 designated to receive a portion of the mark to indicate a tardy payment and its degree
of tardiness.

EMIL R. HERING.