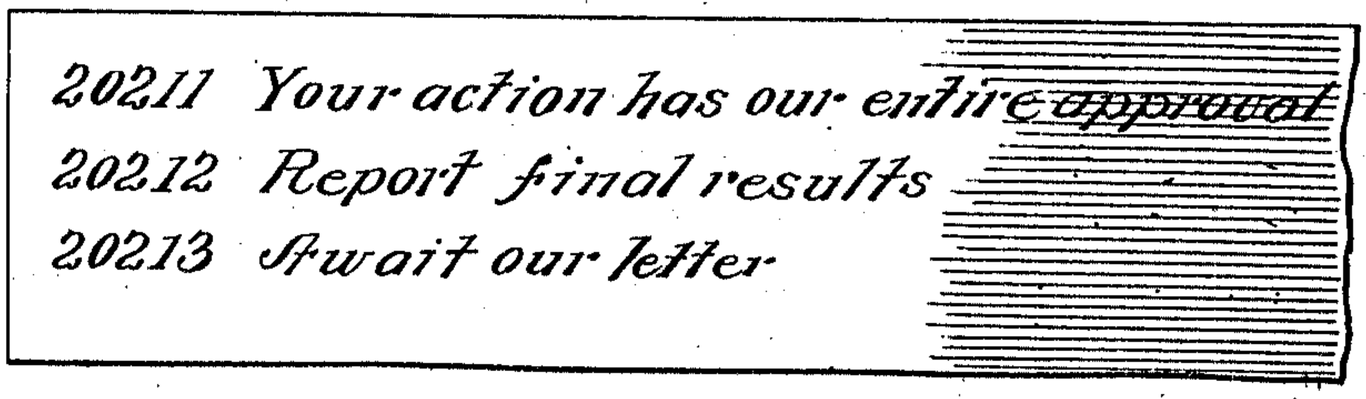
M. E. SWEENEY.

CABLE OR TELEGRAPH CODE.

APPLICATION FILED FEB. 10, 1910.

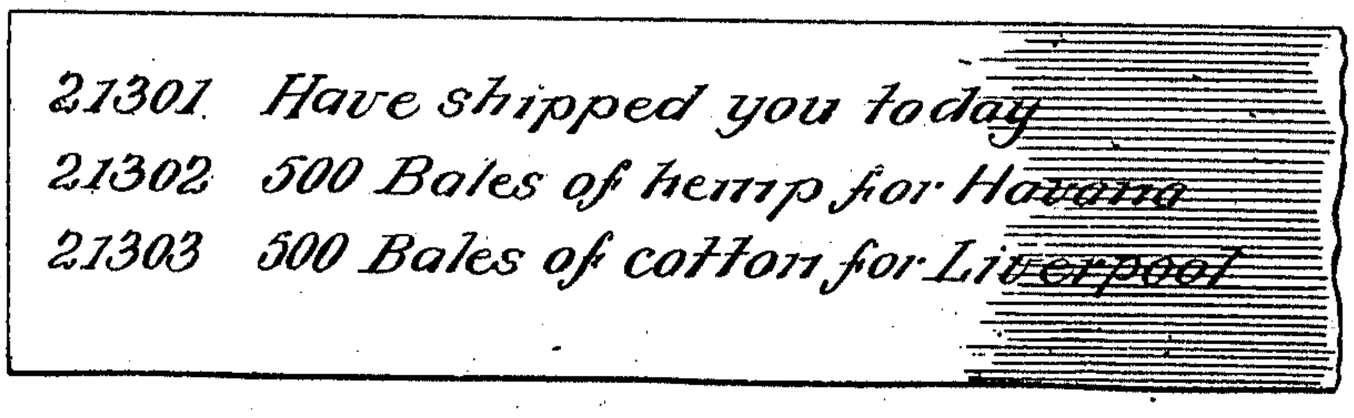
990,021. Patented Apr. 18, 1911.

Fig. 1.



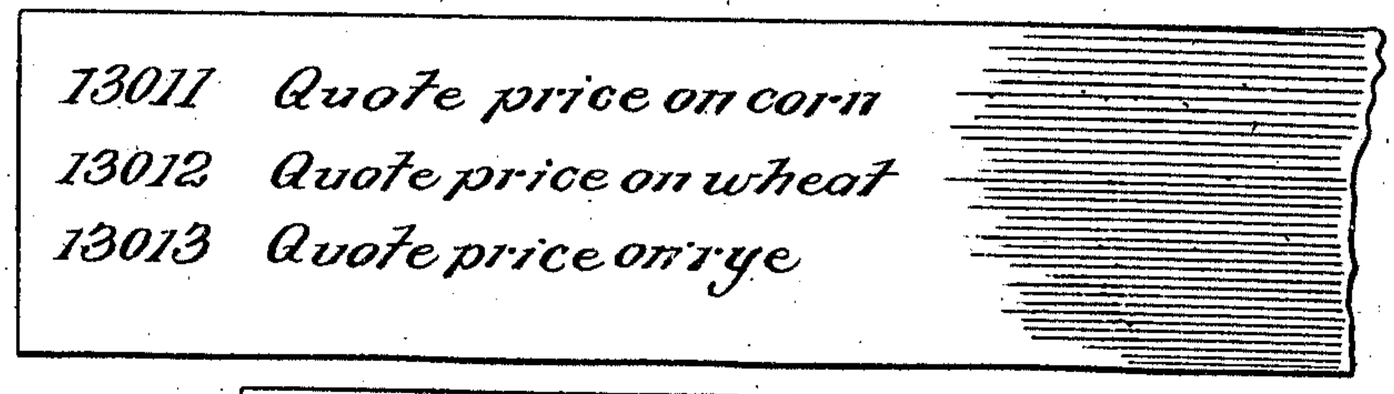
20211 Your action has our entire approval
20212 Report final results
20213 Await our letter

Fig. 2.



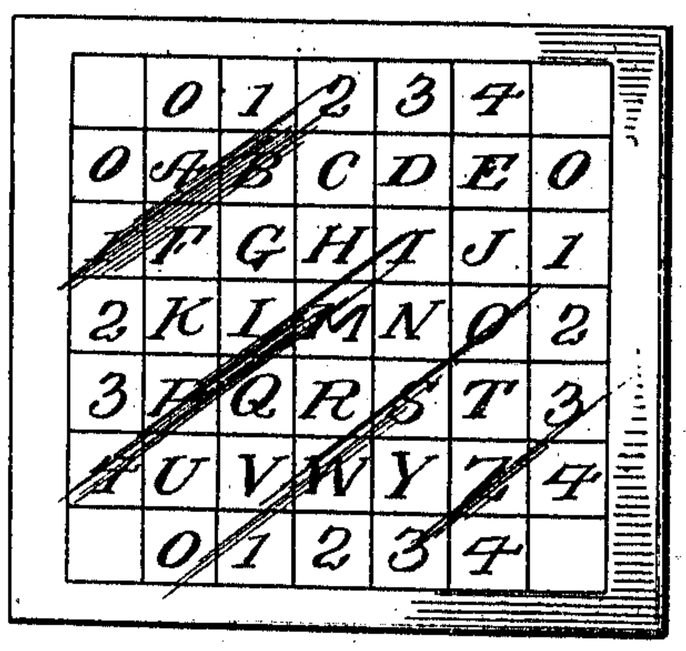
21301 Have shipped you today
21302 500 Bales of hemp for Havana
21303 500 Bales of cotton for Liverpool

Fig. 3.



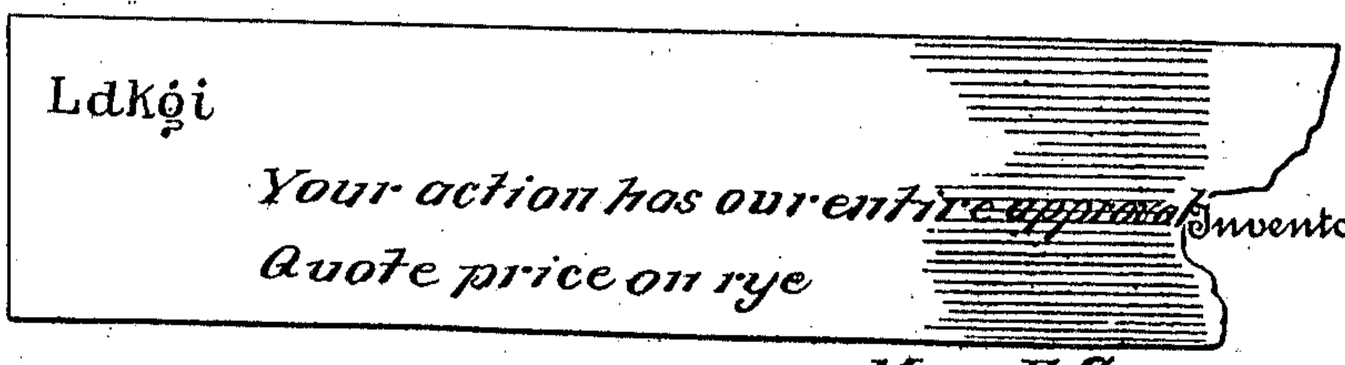
13011 Quote price on corn
13012 Quote price on wheat
13013 Quote price on rye

Fig. 4.



	0	1	2	3	4	
0	A	B	C	D	E	0
1	F	G	H	I	J	1
2	K	L	M	N	O	2
3	P	Q	R	S	T	3
4	U	V	W	Y	Z	4
	0	1	2	3	4	

Fig. 5.



Ldkǫi

Your action has our entire approval
Quote price on rye

Witnesses
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CABLE OR TELEGRAPH CODE.

990,021. Specification of Letters Patent. Patented Apr. 18, 1911.

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To all whom it may concern:

Be it known that I, MARY E. SWEENEY, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Cable or Telegraph Codes, of which the following is a specification.

My invention relates to certain new and useful improvements in cable or telegraph codes, the primary object of which is to produce a code by means of which the tolls for the transmission of messages will be materially reduced.

A further object of my invention is to produce a code which will be simple and one with which translations can be rapidly and accurately made.

With these and other objects in view my invention consists in providing each phrase of the code book with a number formed of different combinations of five numerals, and in further providing a table by which letters may be substituted for the numerals, with each letter indicating a numeral of two numbers, whereby letters forming a single word to be transmitted may be substituted for the numbers indicating two phrases to be transmitted.

Referring to the drawings wherein I illustrate portions of the pages of a code constructed in accordance with my system, Figures 1, 2 and 3 indicate sections of the pages of the code; Fig. 4 represents a table by means of which letters are substituted for the numbers of the code phrases; Fig. 5 illustrates a code word together with its translation.

As shown in the drawings Figs. 1, 2 and 3 show sections of the pages of a code and illustrate phrases which it may be desired to transmit. Each of these phrases is numbered, the numbers being formed of different combinations of the numerals appearing in the table, one form of which is illustrated in Fig. 4.

Referring to the table shown in Fig. 4 it will be seen that it comprises twenty five of the letters of the alphabet arranged in five rows reading both horizontally and vertically and preferably the table is ruled into squares with a letter in each square. Arranged on at least adjacent sides of the rows of letters are five numerals, these numerals being the ones which are used to form the numbers to indicate the phrases in the code. As shown these numerals are placed at each end of both the vertical and horizontal rows, but this is merely done for convenience, as it is only necessary that they be placed at one end of the vertical and one end of the horizontal rows.

As shown the numerals run from 0 to 4 but it is to be understood that other numerals may be used if desired.

In order to illustrate the operation of my invention I will suppose that it was desired to send the message "Your action has our entire approval. Quote price on rye". From the portion of the pages shown in Figs. 1 and 3 it will be found "Your action has our entire approval" is numbered 20211 and that "Quote price on rye" is numbered 13013. We therefore have the numbers 20211 and 13013 as indicating the message and these numbers are to be translated into a code word, and it is for this purpose that the table shown in Fig. 4 is used. Taking the first numeral 2 of the first number and the first numeral 1 of the second number these numbers are looked up in the table, the first being always looked for in the numbers at the side of the table and the second number at the top or bottom. The two rows indicated by these numbers intersect at the letter "I". Then taking the second numeral of each number and looking them up in the same way, will give the letter "d", the third numerals the letter "k", the fourth numerals the letter "g" and the fifth numerals the letter "i". The word to be transmitted is therefore "Ldkgi".

It will of course be understood that where the message to be transmitted consists of an odd number of phrases, or where but a single phrase is to be sent, the single phrase in one case and the last phrase in the other case can be repeated, in order to give a pair of numbers for translation.

Without enumerating the equivalents and without setting forth all the forms my invention may take, what I desire to secure by Letters Patent is:

A code which consists of a series of numbers, each of which has a predetermined meaning, a table comprising a plurality of letters of the alphabet arranged in rows reading vertically and horizontally, numerals arranged at two adjacent edges of the table, said numbers being composed of the same numerals as those appearing in the

table, whereby two numbers having the desired meanings may be formed into a single code word by determining the letter of the table representing the first numeral of each number and then each of the other pair of numerals, and arranging the letters so formed into a code word.

In testimony whereof I affix my signature in presence of two witnesses.

MARY E. SWEENEY.

Witnesses:
F. L. BROWNE,
K. E. KLEIN.