Dec. 22, 1942. C. LORBER 2,305,972

CREASED SHEET FOR KNOWLEDGE TEST

Filed Feb. 24, 1942 2 Sheets-Sheet 1

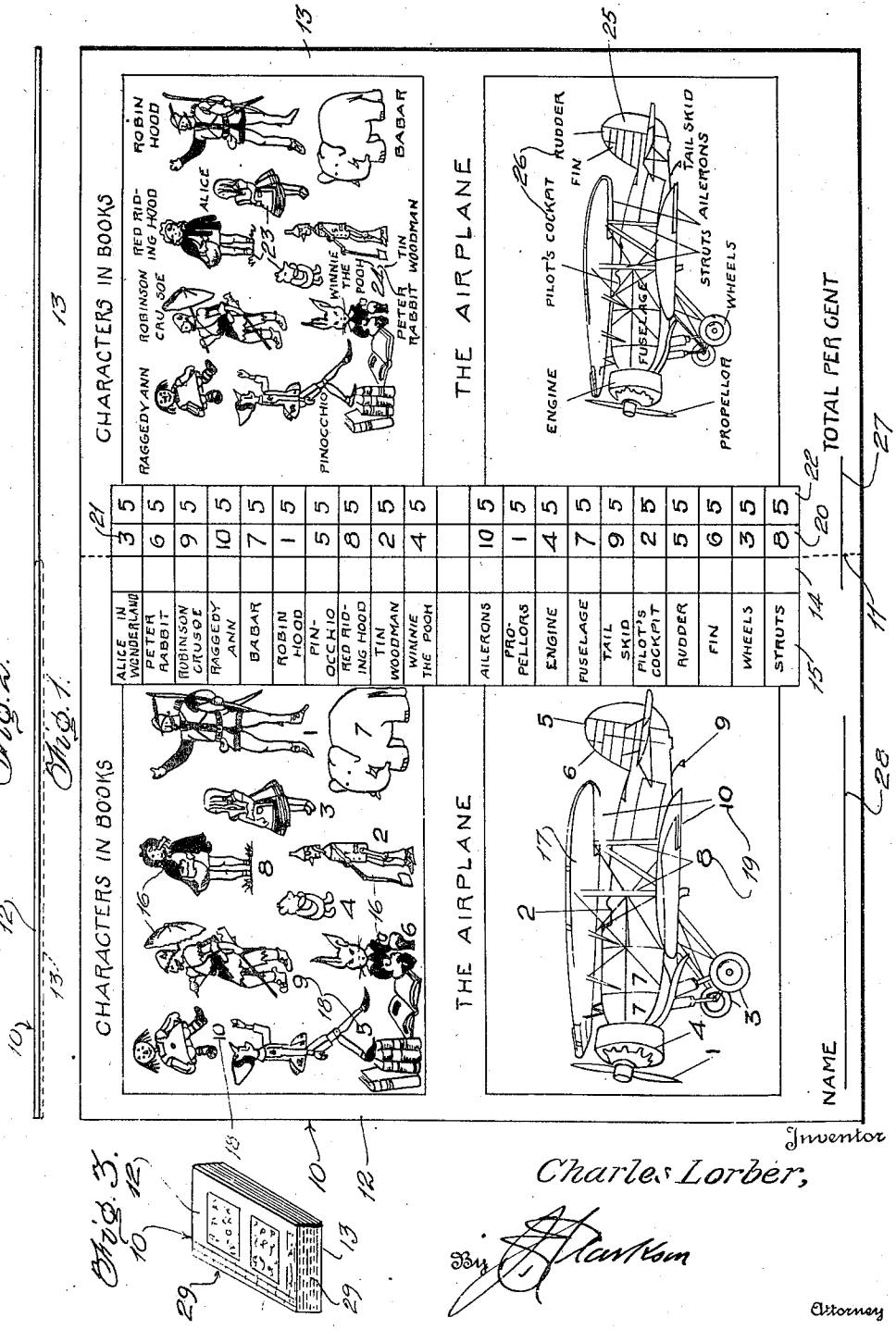


Fig. 2.

Fig. 1.

Fig. 3.

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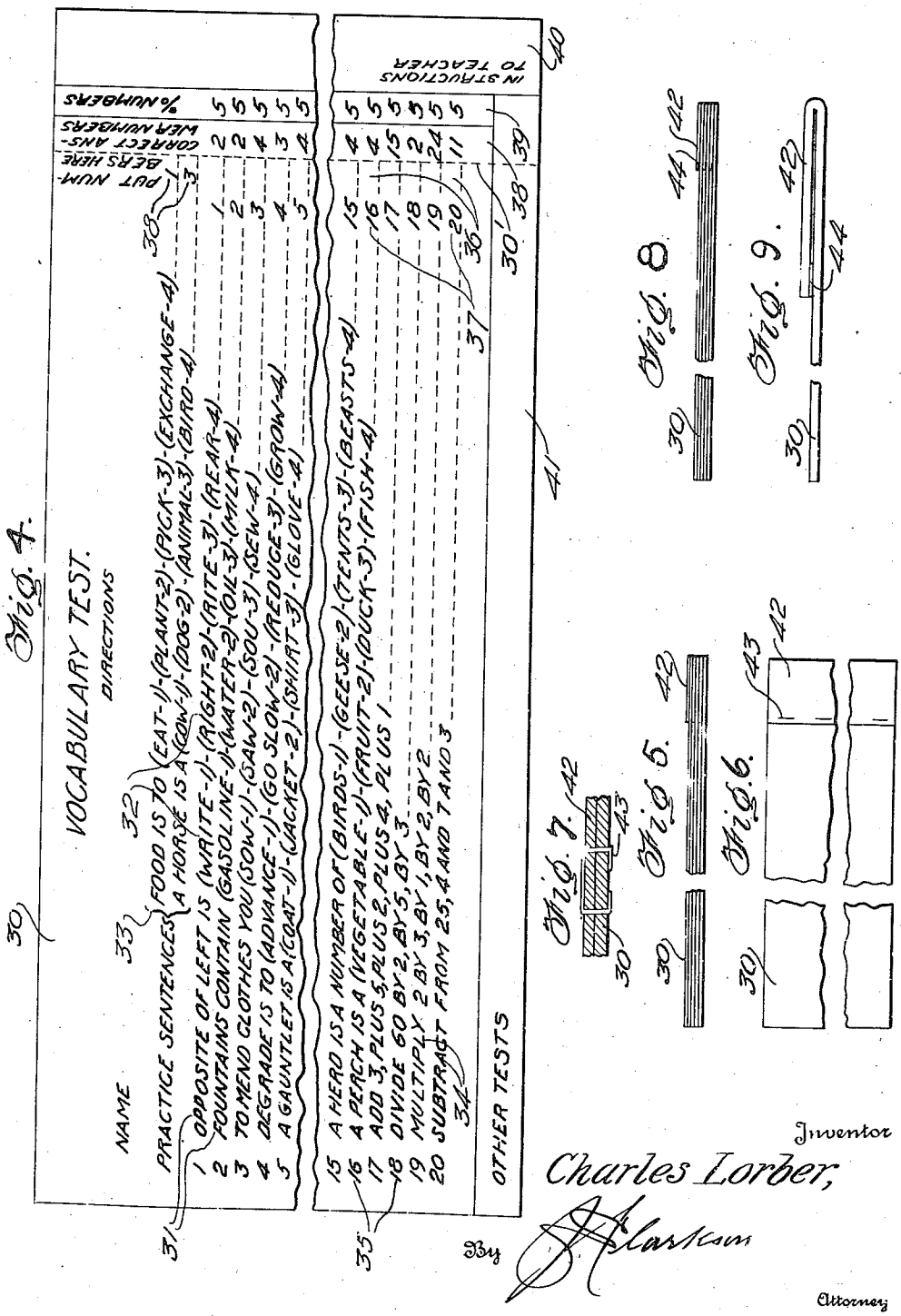
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CREASED SHEET FOR KNOWLEDGE TEST

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2,305,972

CREASED SHEET FOR KNOWLEDGE TESTS

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2 Claims. (Cl. 35—48)

This invention relates to educational apparatus and has special reference to a creased sheet for mental tests.

At the present time many institutions are using certain tests to determine the intelligence quotient (I. Q.) of individuals being examined. For instance, the U. S. Government is using a knowledge test sheet for determining the I. Q. of enlisted and inducted men so that the officer in charge may obtain an idea of the general mentality possessed by those being examined. As now practiced by the Government a sheet is used containing a number of tests each consisting of a partial sentence followed by a number of words only one of which will complete the sentence and express a truth. For instance, one such test may read thus:

"A herd is a number of (birds) (geese) (tents) (houses) (beasts)."

The person taking the test underscores or otherwise marks the word which he believes correctly completes the sentence. The examiner credits the person with all sentences in which the correct words have been selected and calculates the percentage relation of the correct answers when compared with the total number of tests given the individual. By the time the individual has completed his examination and finished marking up the sheet it has been rendered unsightly by all the pencil or ink markings. It then becomes difficult for the examiner to check the answers and valuable time is lost.

In other tests a group of pictures are used and the person being examined has to write out what each of the pictures represents. The number of correct answers is compared with the number of pictures described and the percentage of correctness determined. This is also a laborious and time wasting method.

The principal object of the present invention is to provide a very simple and efficient means for taking and recording intelligence tests, the means enabling the tests to be rapidly completed and the necessary calculations to be readily and rapidly performed.

A second important object of the invention is to provide a novel means for such tests wherein the answers are given by the person inserting numbers into blank squares provided on a specially arranged test sheet.

A third important object of the invention is to provide a novel creased sheet having correct answer indicia on one side of the crease and blanks on the other side of the sheet for entry of answer indicia by the person being examined, the sheet being folded on the crease to hide the answer indicia during the taking of the test.

A fourth important object of the invention is to provide a pad consisting of a series of folded test sheets of this kind so assembled that the portion of each sheet containing the spaces for answer indicia is all that is exposed by removal of upper sheets of the pad.

With the above and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings and particularly claimed.

In the accompanying drawings like characters of reference indicate like parts in the several views, and:

Figure 1 is a face view of a sheet constructed in accordance with this invention.

Figure 2 is a top edge view of the sheet shown opened out in full lines and with one half folded back in dotted lines.

Figure 3 is a diagrammatic view of a pad constructed in accordance with this invention.

Figure 4 is a face view of a sheet constructed in accordance with this invention as used for taking word tests and other like tests.

Figure 5 is a broken end view showing a pad of test sheets arranged to disclose one modification of the invention.

Figure 6 is a broken face view of the sheet arrangement shown in Figure 5.

Figure 7 is an enlarged detail section showing the flap arrangement used in Figures 5 and 6.

Figure 8 is a view similar to Figure 5 but showing a second modification of the sheet arrangement.

Figure 9 is an enlarged broken edge view of one of the sheets of Figure 8.

In the construction of the invention as here disclosed there is provided a sheet 10 of paper, cardboard or other suitable material. This sheet is of rectangular form and is provided with a crease or fold line 11 extending from the top to the bottom edge and dividing the sheet into a test portion 12 and an answer and totalizing portion 13. On the portion 12 adjacent the crease 11 is a column of blanks 14 and at the left of the column 14 is a column 15 containing a series of names. At the left of the column 15 are pictures of objects whose names appear in column 15. While the invention is not restricted to any particular character of objects there has been here shown a group of ten figures 16 representing characters from books and there is also shown below these characters an airplane 17. Each of

the characters 16 has associated therewith a numeral 18. Similarly, the airplane 17 has ten of its parts indicated by numerals 19. The names of the characters 16 and the parts of the airplane 17 are printed in the spaces of the column 15. While there are ten characters and ten airplane parts numbered in the examples shown it is not my intent to confine the invention to any particular number of objects or parts to be used in a test. It has been found, however, that twenty named things affords convenience in calculating the percentage of correct answers in a test since each answer will have a value of 5 on a scale of 100 and thus the number of correct answers multiplied by five will give the percentage of correctness. Many changes may be made from the illustrative matter here shown. For instance, an army test sheet may have a series of representations of an officer giving the various hand signals used to direct troops.

On the portion 13 next the crease 11 is a column 20 of spaces wherein are numerals 21 corresponding to the numerals 18 and 19 and so positioned that the numeral 21 opposite the name in column 15 will correspond to the numeral 18 or 19 of the character or part bearing that name. Thus the character with which the numeral 1 of the character numerals 18 is associated represents Robin Hood and accordingly the numeral 1 appears in column 20 opposite the name Robin Hood in column 15. At the right side of the column 20 is a column 22 of spaces arranged opposite the spaces in column 20 and each bearing a figure equalling the percentage value of the individual test. In the present showing in which there are twenty individual tests each space in column 22 bears the numeral 5. On the portion 13 is a group of figures 23 duplicating the figures 16 and having the names 24 of these figures associated therewith. Similarly the representation of the airplane is duplicated at 25 and the parts are named by names 26. At the bottom of column 22 is a line 27 on which to enter the total credits as shown in that column and on the bottom of the portion 12 is a line 28 on which the person being tested writes his signature.

In using this test sheet the portion 13 is so folded on the crease line 11 as to hide the part 13 beneath the part 12 and the folded sheet is placed before the person being examined. In case the sheets are padded up as in Figure 3 the portion 12 of the top sheet will be all that is visible. The person examined then writes in the spaces of column 14 opposite each name in column 15 the number which he believes is that of the figure or part named. He then signs the sheet and returns it to the examiner. The latter now opens the sheet and compares the numbers written in column 14 with those printed in column 20 and either checks the spaces in column 22 where discrepancies occur or checks those spaces in column 22 where the opposed written and printed numbers agree. In the first case he adds up the unchecked numbers and in the second case the checked numbers and writes the total on line 27. This gives the percentage rating for the full test. Obviously the representations 23 and 25 with their printed names or descriptions may be used to facilitate this work if desired. Also, these representations 23 and 25 may be used in teaching the names of persons or things by first displaying the portion 13 to a student to enable the latter to familiarize himself with the information shown and named on portion 13, the testing described above being given the pupil at some later time.

The portion 13 may be shortened by the omission of that part containing the representations 23 and 26.

It will be observed that the examination of sheets of this character may be made by any one able to compare the written numbers of column 14 with the printed numbers of column 20. Thus a student can determine the correctness or inaccuracy of the series of tests even though such student may have otherwise insufficient knowledge. For example, a person having no knowledge of airplane nomenclature can check the work done in regard to the representation 17 as well as an expert in airplane construction.

In padding the sheets of this form a sufficient number to form the pad are folded with the portion 13 below the portion 12 and piled one on the other. An adhesive layer 29 is then applied to their edges.

This layer may be originally a gummed strip or may be simply a coating of glue or the like. Also this layer may be used on one edge of the pad or may cover two, three or four of the pad edges. When using the padded sheets it will be clear that only the portion 12 of the top sheet will be exposed for writing numbers in columns 14. By thus padding the sheets a person may be given a test covering a wide range of subjects since each of the padded sheets may cover a subject or subjects different from that shown on the other sheets. Obviously, both sides of a sheet may be used and the printing on one side may differ from that on the other.

In the form of the invention shown in Figure 4 the sheet is shown as a word and simple arithmetic test sheet 30 having a number of incomplete sentences 31 at the left of the sheet. Each of these sentences is followed by several parenthetical expressions 32, each including a word followed by a number. Each of these words will complete the particular sentence with which it is associated but only one of each group will express a true relation when so added to the sentence. Practice sentences or examples are shown at 33.

Below these sentences 31 is a set of lines 34 each giving an arithmetical problem. The sentences 31 and the lines 34 are numbered for reference as at 35. Toward the right of the sheet is a column of spaces 36 alined with the sentences 31 and lines 34 and like them provided with reference numbers 37. At the top of this column are printed numbers 38 corresponding to the numbers accompanying the correct words to be used in completing the sentences 33 used as examples and above this are printed instructions to the person taking the test to put the numbers of the words, or numbers in the arithmetic tests, selected by him as properly completing the sentences and answering the problems in arithmetic. Next the spaces 36 is a column 38 of correct answer numbers and next these is a column of percentage numbers 39 giving the percentage value of the several answers given. As here shown there are twenty answers to be given so that each percentage number has a value of five. However, the test may require other numbers of answers than twenty and the percentage values will vary in accordance with the numbers of answers to be given. For instance, for ten answers each percentage value will be ten, for twenty-five answers each percentage value will be four and so on.

A space 40 is left at the right edge of the sheet for instructions for the teacher or other person

conducting the test and at the bottom of the sheet is a space for such other tests (as for example a writing test) as may be desired. In this form the column **38** is defined from the spaces **36** by a crease or fold line or perforated line **30'** so that the part of the sheet containing columns **38** and **39** may be folded under or removed when giving the test thus preventing the person taking such test from seeing the correct answer numbers.

Other arrangements for concealing the column **38** during taking of the test are illustrated in Figures 5 to 9. In these figures the part of the sheet at the right of the spaces **36** is doubled over so that the right edge portion covers the column **38**. This doubled portion **42** is shown in Figures 5 to 7 as secured by staples **43** and in Figures 8 and 9 by adhesive **44** of suitable character.

In operation the sheet is arranged so that the person taking the test sees only the part of the sheet to the left of line **30'**. He then writes in the spaces the numbers of the words he believes properly complete the sentences and the numbers properly answering the problems in arithmetic. The sheet is now taken by the teacher and manipulated to bring columns **38** and **39** alongside the spaces **36** so that the numbers written in the spaces **36** may be compared with those printed in column **38**. Where the number in a space **36** is unlike that opposite the space in column **38**, the teacher draws a line through the corresponding number in column **39**. The remaining numbers in column **39** are then added and the sum will give the percentage of correct answers.

What is claimed is:

1. A mentality testing device comprising a paper sheet having a fold line extending from top to bottom of the sheet and dividing the sheet into two parts, said sheet having vertical lines parallel to said fold lines, the vertical lines being four in number with two on each side of the fold line, said sheet having parallel horizontal lines extending between the horizontal lines most remote from the fold line and intersecting the fold line and the remaining vertical lines, said vertical and horizontal lines being arranged to provide four columns of spaces, the two parts of said sheet carrying identical pictorial representations each consisting of a number of elements, the elements of the pictorial representation on one sheet part having numerals printed adjacent to said elements and the pictorial representation on the other sheet part having the names of the several elements printed adjacent to said elements, the first of said columns of spaces having said names printed in the respective spaces, the spaces of the second column being blank, the spaces of the third column having numbers printed thereon corresponding to the numbers adjacent the numbered pictorial elements, the names in the first column and the numbers in the third column in alignment with said names indicating like elements of the pictorial representation, said sheet being folded on said fold line with the part carrying the named elements of the pictorial representation under the other part whereby said named elements are concealed from view during the mentality test.

2. A mentality testing device comprising a paper sheet having a fold line extending from top to bottom of the sheet and dividing the sheet into two parts, said sheet having vertical lines parallel to said fold lines, the vertical lines being four in number with two on each side of the fold line, said sheet having parallel horizontal lines extending between the horizontal lines most remote from the fold line and intersecting the fold line and the remaining vertical lines, said vertical and horizontal lines being arranged to provide four columns of spaces, the two parts of said sheet carrying identical pictorial representations each consisting of a number of elements, the elements of the pictorial representation on one sheet part having numerals printed adjacent to said elements and the pictorial representation on the other sheet part having the names of the several elements printed adjacent to said elements, the first of said columns of spaces having said names printed in the respective spaces, the spaces of the second column being blank, the spaces of the third column having numbers printed thereon corresponding to the numbers adjacent the numbered pictorial elements, the names in the first column and the numbers in the third column in alignment with said names indicating like elements of the pictorial representation, the spaces in the fourth column having value numbers printed therein, the numbers in the fourth column when added totalling 100, said sheet being folded on said fold line with the part carrying the named elements of the pictorial representation under the other part whereby said named elements are concealed from view during the mentality test.

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