

J. M. W. Geist

Arithmetical Library Arrangement.

N^o 51,823.

Patented Jan. 2, 1866.

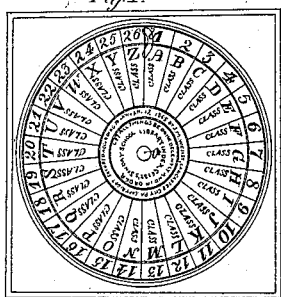


Fig. 2.

| | |
|-----|--------|
| Out | 51, 80 |
| | 52 |
| | 54 |
| | 57 |
| | 60 |
| | 61 |
| | 64 |
| | 70 |
| | 71 |
| | 79 |

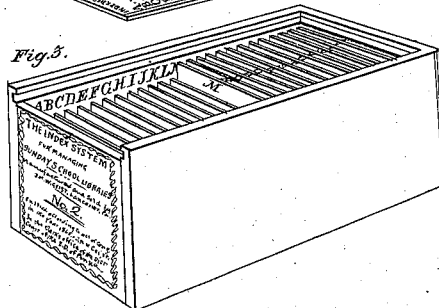
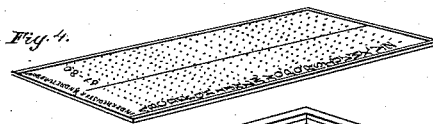


Fig. 6.

| No. | NAME OF BOOK | No. |
|-----|--------------------|-----|
| 1 | The Old Dog | 231 |
| 2 | The Old Horse Book | 232 |
| 3 | Stories of Old | 233 |
| 4 | Stories of Old | 234 |
| 5 | Stories of Old | 235 |
| 6 | Stories of Old | 236 |
| 7 | Stories of Old | 237 |
| 8 | Stories of Old | 238 |
| 9 | Stories of Old | 239 |
| 10 | Stories of Old | 240 |
| 11 | Stories of Old | 241 |
| 12 | Stories of Old | 242 |
| 13 | Stories of Old | 243 |
| 14 | Stories of Old | 244 |
| 15 | Stories of Old | 245 |
| 16 | Stories of Old | 246 |
| 17 | Stories of Old | 247 |
| 18 | Stories of Old | 248 |
| 19 | Stories of Old | 249 |
| 20 | Stories of Old | 250 |

Fig. 7.

| Class A. | No. |
|----------------|-----|
| Robert Bayard | 52 |
| Simon Bayard | 54 |
| Samuel Bayard | 57 |
| Joseph Bayard | 60 |
| William Bayard | 61 |
| Henry Bayard | 64 |
| John Bayard | 70 |
| Philip Bayard | 71 |
| Barth Bayard | 79 |

Fig. 8.

| No. | NAME OF BOOK | No. |
|-----|--------------|-----|
| 1 | | 231 |
| 2 | | 232 |
| 3 | | 233 |
| 4 | | 234 |
| 5 | | 235 |
| 6 | | 236 |
| 7 | | 237 |
| 8 | | 238 |
| 9 | | 239 |
| 10 | | 240 |
| 11 | | 241 |
| 12 | | 242 |
| 13 | | 243 |
| 14 | | 244 |
| 15 | | 245 |
| 16 | | 246 |
| 17 | | 247 |
| 18 | | 248 |
| 19 | | 249 |
| 20 | | 250 |

Witnesses.

W. B. Wiley
Sam. Stauffer

Inventor.

J. M. W. Geist

UNITED STATES PATENT OFFICE.

J. M. W. GEIST, OF LANCASTER, PENNSYLVANIA.

IMPROVEMENT IN SYSTEMS FOR LIBRARIES.

Specification forming part of Letters Patent No. 51,823, dated January 2, 1866.

To all whom it may concern:

Be it known that I, J. M. W. GEIST, of the city of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented a new and Improved System for Managing Sunday-School Libraries; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and illustrations, with the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is the face, with its revolving disk, of the library-index; Fig. 2, the back of the same covered with a slate-surface; Fig. 3, the index-box, and Fig. 4 the lid or register; Fig. 5, the index-catalogue; Fig. 6, a continuation of the same for filling in new books; Fig. 7, the inside of the catalogue-cover, partly covered with a slate-surface, for the purpose shown. Fig. 8 illustrates one of the index library-tags.

The object of my invention is to facilitate and systematize the distribution of library-books among the respective classes of Sunday-schools in such manner as to entirely avoid the confusion and delay incident to other plans; to secure a simple, correct, and reliable record of the weekly condition of the library, thereby insuring a large saving of books usually lost through imperfect and disputed accounts; and to greatly simplify the duties and economize the time of librarian and teachers.

The nature of my improvement consists, first, in the arrangement of the library into equal divisions, corresponding with the maximum number of classes in the school; second, in the construction and use of the library-index, index-catalogue, index-box and register, and the index library-tags.

To enable librarians and others to use my invention, I describe the same in detail and operating in combination as a system as follows:

I. The library.—The maximum number of the classes in the school having been ascertained, the books in the library are arranged in equal divisions corresponding in number with the classes, and each division or alcove numerically designated from 1 upward. In schools which are not graded, or where the number of classes does not exceed twenty-six,

or at most thirty-two, each division is so arranged as to be a complete library in itself, being thereby adapted to meet the wants of pupils of various ages and capacity in the same class, books of the first grade being uniformly apportioned to the several divisions, and so with the second, and as many more grades as the classification of the books will allow. All serial works are placed in consecutive order in the divisions, so that the scholar who reads the first volume one week will have an opportunity of selecting the second the week following, and so on. In larger schools, where the classes are graded, the importance of which I urge upon all who adopt this system, the school is worked in two or more sections of twenty, twenty-six, or thirty-two classes each, in which case the library is further arranged in corresponding sections or grand divisions to suit the different grades, each being worked by its own librarian and with a separate outfit, corresponding substantially with that described in these specifications.

II. The library-index.—This device—the prominent feature of the system—is so called because it indicates or points out a systematic distribution of the books. It is manufactured of a superior article of double-rolled cardboard or metal, or any other suitable material may be used. The index, in its outer form, is from three to four inches square. That portion of the face, Fig. 1, inclosed by the outer pink and colored yellow is a revolving disk, which is pivoted to the back at the center *a*, and is moved by a tape loop placed at *b*. The letters of the alphabet on the margin of this disk are the names or designations of the different classes. Where these exceed twenty-six the additional classes are designated as second A, (A^2) second B, (B^2) and so on. The figures on the fixed margin outside the disk correspond with the divisions of the library, already described, and also with the folios of the catalogue. The back of the index, Fig. 2, which is glued or otherwise secured to the fixed margin, is covered with Peirce's patent slate-surface, which, from its lightness, elasticity, and durability, is found to be an admirable composition for the purpose. Each index is also designated on the back, Fig. 2, as belonging to a particular class (in the sample shown Class A is designated) by being la-

beled respectively A, B, C, D, &c. The outer edges are covered with a coating of paraffine-varnish, which corresponds in color with the slating surface and acts as a preservative of the card-boards where they are joined together. Thus constructed these indexes are cheap and durable, as with ordinary care they will last a life-time.

III. *The index-catalogue.*—Essential as catalogues are to the complete working of a library, they have been objectionable under the old plans on account of the expense of keeping them up—any material changes made in the library involving the expense of new catalogues. To avoid this serious objection is the object of my improved catalogues, as a single set will last for years, and admit of any desired additions to the library without impairing the uniform system of numbering secured by this new system. This result is attained by so arranging the pages (Fig. 5, page 20) in uniform divisions that, while the numbers of the books are always consecutive, blanks are left on each leaf or alternate page for the titles and numbers of new books, (Fig. 6, page 20,) each page being always a record of the books in the corresponding division of the library. Thus in a library containing seven hundred and eighty volumes arranged in twenty-six divisions, each division containing thirty, the first page of the catalogue embraces the numbers and titles from 1 to 30, inclusive. The second begins with 51, and contains the intervening numbers to 80, the third from 101 to 130, the fourth from 151 to 180, &c. This leaves twenty blanks for inserting new titles as books are added from time to time to the corresponding divisions of the library. The additions can be either written on the blank lines, Fig. 6, arranged for that purpose, (the catalogues being printed on a good quality of writing-paper,) or they may be printed on slips, then cut into twenty-six parts and one part pasted on the blank of each page. In addition to the numbers of the books placed before the title, I add in a column on the right the number of pages in each volume, which aids the teacher in selecting books adapted to the age and capacity of the pupil. And to make the index-catalogue available as a class-book the inside of each lid is partially covered with a slated surface, with blank lines for the names of the scholars, in which the teacher can keep a record of their attendance, charge their books, or such other memoranda as may be desired, (Fig. 7 illustrates the cover,) thus saving the expense and avoiding the inconvenience of carrying more than one book.

For the accommodation of such schools as may not feel able to incur the expense of printed catalogues I have modified my improvement in such manner that the library can be worked under the index system with a single copy of a written catalogue arranged as follows: The titles of the books, with their numerical designations and number of pages, are written on

sheets of paper equal to and numbered to correspond with the divisions of the library. For greater convenience and durability these sheets may be pasted on card-board or its equivalent. When the librarian distributes the indexes he sends with the one belonging to each class the page or sheet corresponding with the index figure opposite the letter of that class, changing the order of distribution each Sunday, as indicated by the movement of the disk. The result is practically the same as if each class had a full catalogue.

IV. *The index-box.*—To facilitate the working of this system, the indexes are put up in boxes, Fig. 3, and numbered in sets according to the size of the school. No. 2, which is represented by the drawings reduced to half-size, (shown in perspective by Fig. 3,) being designed for a school of twenty-six classes, contains twenty-seven indexes, one for each class and one for the special use of the librarian. The box is constructed with compartments, each having an alphabetical designation to show where each index belongs. The inside of the sliding lid (shown in perspective over the box by Fig. 4) is covered with Peirce's patent slate-surface, and contains the designations of the classes down the left margin and a blank line opposite each one. There is also a dividing-line shown down the middle. This is used as a register of unreturned books, the index-box thus containing within itself all the appliances for working a library and keeping a full, correct, and always reliable record of its condition, entirely dispensing with the complex, laborious, and imperfect plans of record hitherto in use.

V.—*The index library-tags.*—As a part of this system, and included in each outfit, is one or more sets of library-tags, (Fig. 8 illustrates one of them,) being neatly-printed labels, showing, in addition to the usual numerical designation of each volume, the particular division of the library to which such book belongs, which greatly facilitates the operations of the librarian in taking out and returning books. These are furnished in sheets arranged in divisions, each division containing fifty tags. These tags are made adhesive by first saturating the paper on which they are printed with a solution of tannic acid, and then coating the sheet with a preparation of isinglass or its equivalent. The adhesion to the book is rendered perfect by wetting the binding with said acid before attaching the tag. The isinglass (*ichthyocolla*) having a strong affinity for tannin, the tag adheres as firmly as if it were a part of the book.

Operation of the system: The operation of the index system, of which the foregoing-described appliances each constitute a part, may be briefly set forth as follows: The library having been properly arranged, the classes named in alphabetical order around the room, and each furnished with a catalogue, the librarian sets the rotating disks of the indexes uni-

formly, the first class, A, pointing to the figure 1; the second, B, to the figure 2, &c. The indexes are then distributed to the classes in order, who select the books they may want from the page of the catalogue corresponding with the figure opposite the letter of the class and write the numbers of the books thus chosen on the back of the index. The indexes are then returned to the librarian, who will find the books selected by class A in the first division and by class B in the second division, and so on, and he distributes them accordingly. The indexes are then placed in their respective compartments in the index-box, the numbers written thereon by the teachers being the only record or charge necessary to make against the respective classes for the books taken out. On the following Sunday, if all the books are returned—a rule which is enjoined as absolute by this system—the librarian erases these numbers, which squares the account between him and the classes for the previous Sunday. The returned books having been replaced, the librarian moves the disk of each index one point to the right, which throws every class into a new division of the library, when the selections and distribution are made as before, the operation being substantially the same on each successive Sunday.

The advantages of such a system are obvious, as it places all the classes on an equal footing, prevents the confusion of two or more classes selecting the same books on the same day, and the disappointment necessarily arising therefrom establishes a system of recording about which there can be no disputes, saving both librarian and teachers much vexation and loss of time, while it also prevents particular classes from monopolizing the use of favorite books to the prejudice of others with equal claims, at the same time giving every class an opportunity to select, in their turn, any book in the library; all these advantages being secured at a cost not exceeding the rate of fifty cents per class.

Register of unreturned books: In case any books are not returned the Sunday after they are taken out, as required by the rule, the scholars selecting from the division to which such books belong would be liable to choose books not in the library, and thus loss of time in making a new selection, as well as a defect in the librarian's accounts, would result. To meet this difficulty the register of unreturned books is provided as follows: Suppose class B does not return Nos. 51 and 80 belonging to the second division, the librarian will charge them on the register on the box-lid opposite B, Fig. 4, and mark them on the next preceding index (which is A) thus, "out, 51, 80," Fig. 2. Class A, seeing that these books are out of their divisions for the day, will of course not select them. The same course is pursued with all other classes not returning books, the simple rule being to enter their numbers on the next preceding index and charge them

on the register opposite the letter of the class which kept them out. And in case any books are kept out over the second Sunday they must be again entered as "out" on the index of the class thrown into the division to which such book belongs, which can be ascertained by a glance at the register after the collection of books is completed for the day, the register then being a complete record of all books out of the library contrary to rule. To facilitate this the numbers of all books kept out over one week should be kept on the left of the line running down the middle of the register, and those unreturned on that day placed on the right of the same.

The index marked "librarian" is used by him in case he may have occasion to consult its indications when the other indexes are in the hands of the teachers, and also for the purpose of charging any books which he may loan to persons not connected with any particular class.

This system may also be worked with a single index in the hands of the librarian, in connection with the catalogue sheets or cards previously described, which may be backed with slate-surface to enable the teachers to write thereon the number of the books selected, or separate slates or cards may be used for that purpose, the librarian changing the catalogue-sheets each Sunday from class to class, as indicated by the index; but while this plan costs but a trifle less than the other it is not so complete, and consequently less satisfactory.

As printed instructions for working the index system, covering the minutest details of the practical operation in the school-room, are furnished with each outfit, the foregoing explanations are deemed amply sufficient for the purpose of these specifications.

I am aware that revolving disks made of metal or card-board have been employed for various purposes. I therefore do not simply claim a revolving disk, nor, in fact, any of the devices employed, independently considered, apart from its appropriate place appertaining to my system for regulating Sunday-school libraries. Believing, however, that I have invented novel and useful modes (in the respective departments constituting my entire system) both in the device employed and manner of application, constituting separate claims,

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The arrangement of Sunday-school libraries into uniform divisions, numerically corresponding with the classes of the schools, in combination with the figures on the fixed margin of the index and the folios of the catalogue, substantially in the manner and for the purpose specified.

2. The employment of the index, with its revolving disk, for the designation of classes and divisions, substantially as shown, for the purpose specified.

3. The arrangement of the catalogue into

uniform divisions (with uniform intervening blanks consecutively numbered) corresponding with the divisions of the library and the classes in the school, also the application of the catalogue as a teacher's class-book, substantially in the manner specified.

4. The construction and use of the index-box and its sliding lid with its slate-surface, or equivalent, and designations of classes as a register, substantially as shown, and for the purpose specified.

5. The peculiar method of securing library-

tags by the use of isinglass and tannic acid independently applied, in the manner and for the purpose specified.

6. The combination and use of the index, index-box, and register, catalogue, and tags as a system, arranged and operating substantially as and for the purpose fully set forth and shown in the foregoing specification.

J. M. W. GEIST.

Witnesses:

WM. B. WILEY,
JACOB STAUFFER.