J. T. WHITE.

ANATOMICAL CHART.

No. 342,154.

Patented May 18, 1886. WY FIE 3. FIG.

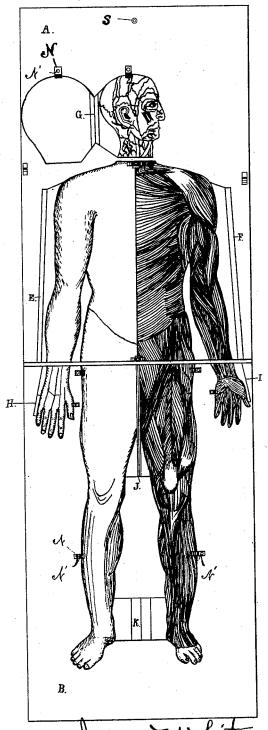
ATTEST. John H. Redstone L. E. Redstone — James White

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FIG. 2.



INVENTOR,

John H. Redotane

N. PETERS. Photo-Lithographer. Washington. D.

## United States Patent Office REISSUED

JAMES T. WHITE, OF SAN FRANCISCO, CALIFORNIA.

## ANATOMICAL CHART.

SPECIFICATION forming part of Letters Patent No. 342,154, dated May 18, 1886.

Application filed October 29, 1885. Serial No. 181,267. (No model.)

To all whom it may concern:

Be it known that I, James T. White, a citizen of the United States, residing in the city and county of San Francisco, and State of 5 California, have invented a new and useful Anatomical Chart, of which the following is

a specification.

My invention relates to anatomical charts: and it consists in providing a full-sized fold-10 ing manikin of portable construction, which is adapted to the use of school-teachers and lecturers, as well as for private families. It fully answers the purpose of the most costly chart, while it is far more portable and durable when exposed to careless handling. It may be constructed of pasteboard, bristol-board, papier-maché, or other suitable material for presenting plain or embossed representations of the form and structure of the different or-20 gans of the human body, the whole when folded being contained in a convenient-sized portfolio to carry in the hand. It is constructed to hang against the wall, the upper section being formed of a single sheet or card, 25 the lower half or section being formed of any convenient number of cards or leaves, to furnish additional charts composed of enlarged or microscopic sections or other representa-

tions of the different organs of the body.

I am aware that books and other publications have been issued to the public setting forth the human organism in a concise and complete manner with full description of the uses of the different organs, and I have not attempted to present any new discovery in anatomical or physiological science; but my object is to present a new and valuable article of manufacture, which will supply a much felt want, of an inexpensive portable and ready means of teaching anatomy and physiology in the schools and colleges and in private families

lies.

My invention will be more clearly understood by reference to the accompanying draw-

45 ings and the letters referring thereto.

Figure 1 is a perspective view of my improved chart folded in the form of a portfolio, showing an extra leaf or card, which may be utilized as a chart, the back piece, V, being 50 removed. Fig. 2 shows the same opened or with the lower portion let down, revealing the

whole human form, with one leaf thrown back or open to show a portion of the head with the venous and muscular structure, and the skin removed from the left side of the body 55 or trunk and the left arm and leg to show the arrangement of the muscles. Fig. 3 is a side elevation of the chart; and Fig. 4 is an enlarged detail view of one of the spring-catches.

The following is the construction of my im- 60 proved chart: I construct the upper and lower sections of equal length, so that when folded, as shown in Fig. 1, the legs, which are wholly contained upon the lower section, are folded up against the trunk or body, thus 65 placing the whole in a convenient portable

form as a portfolio.

A represents the upper section, which contains the body; B, the lower section, which contains the legs; and C represents an extra 70 section, to serve as one outside cover or leaf to afford space for such explanatory charts as may be required—as when microscopic views are shown in explanation of the functions of the organs of the body.

The sections A B are connected at their inner ends by a flexible hinge, D, and the section C is also connected with said hinge, as shown in Fig. 3. The section C is normally hid from view by the section B, and forms an 80 auxiliary section adapted to contain any desired explanatory matter, and when in use the section B is raised to expose it, and is supported in any suitable manner.

I form the hinge D of linen or such other 85 material as is employed in the construction of the hinges of strong and durable book-covers, and the hinges E, F, G, H, I, J, K, L, and M are of similar construction, and secured in the manner of other well-known construction 90

where such hinges are employed.

I employ the catches N for holding the leaves in place when they are opened out. I generally form the catches N of thin sheetbrass or other thin tough metal, to allow the 95 leaves to be sprung under and caught or held down as each successive leaf is being examined. The same device is employed to hold the leaves in position when closed up for placing away, or to keep them firmly in position for 100 transporting.

The catches N are, as shown in Fig. 2, se-

cured by pins N' at one end to the chart, and are open at their other ends, so that the edges of leaves of the chart may be passed under their free ends.

I generally employ the eyelets S for the purpose of hanging the chart upon a hook or

pose of hanging the chart upon a hook or nail to explain the same. The following is the operation of the same: when employed by teachers for illustrating and explaining

10 anatomy and physiology, the eyelet S is hooked upon a nail or hook against the wall or any suitable easel or frame to support it in the required upright position.

V represents a brace or back piece, thicker at its lower than at its upper end, and hinged to the section A at its upper end by a hinge, W. This back piece has a plain or straight rear face to set flat against the wall, while its inner face tapers from its lower to its

upper end, thus causing the leaves to lie closely 20 against the chart.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with a back piece thicker 25 at its lower than at its upper end and having the tapering or slanting inner face, of the chart comprising the hinged sections A B C, the sections A B having a series of hinged leaves with representations of different parts 30 of the human system thereon, the section C having any desired explanatory matter thereon, and spring-catches for holding the leaves in an open position, substantially as set forth.

JAMES T. WHITE.

Witnesses:

JOHN H. REDSTONE, L. E. REDSTONE.