

remembered that the heart muscle has been shown to correspond in every way with the skeletal muscles as regards the output of work and conditions under which work may be done to the best advantage as regards time or load. The heart muscle, however, does not appear to alter in tone so rapidly as do the skeletal muscles. We should consider the possibility that the tone of the muscle of the heart may alternate nearly as does the tone of the skeletal muscles. Until we can prove consistently that certain procedures alter the tone of the heart muscle we must be conservative in accepting such a change of tone as an explanation of or accompaniment of heart-blocks as instanced in the papers read.

Dr. ALBERT E. TAUSSIG, St. Louis: I have under observation a case of congenital stenosis of the pulmonic orifice with a patent ductus arteriosus which shows a phenomenon similar to that described by Dr. Lehmann. The patient is a young man, aged 19, a shoemaker. He is able to earn a good living at his work in spite of his cardiac defect. The heart is enlarged and he has the typical murmur and other phenomena characteristic of stenosis of the pulmonic orifice. The *a* wave in the jugular bulb is exaggerated and shows well-marked alternation in height, especially when he is under the influence of digitalis. Tracings taken some weeks ago show that the radial pulse is about normal, while the jugular pulse shows a high *a* wave which alternates in height. This alternation occasionally fails. Another interesting feature of these curves is that at the same time of the alternation of the *a* wave there is an alternation of the *a-c* interval. The higher the *a* wave the longer the *a-c* interval. This is the reverse of what one might expect *a priori*.

INSTRUCTION OF THE PUBLIC IN ANTI-TUBERCULOSIS MEASURES BY A TRAVELING CAR EXHIBIT

GEORGE HOMAN, M.D.

Chairman Executive Committee, Missouri Association for the Relief and Control of Tuberculosis

ST. LOUIS

When the Missouri Association for the Relief and Control of Tuberculosis was formed in 1907 a main purpose of the organization was declared to be the enlightenment of the public on the disease in question by means of lectures, addresses, demonstrations, and exhibits, these activities being a necessary preliminary to a right understanding of the subject thus presented, and

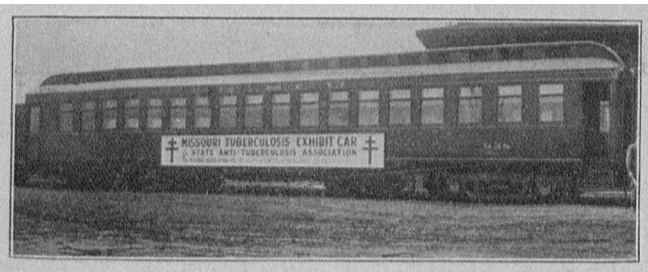


Fig. 1.—Exterior view of antituberculosis exhibit car.

to afford an intelligent basis on which local organization could be brought about.

To the extent that its limited means allowed a consistent effort was therefore made by the association to enlist the interest and aid of local communities through their medical, social and business organizations, and with some success, the medical societies naturally being the leaders and chief supporters of such movements and auxiliary branches were formed in a number of cities and counties of the state. It was found, however, that these bodies tended in time to become listless, and in

casting about for other means of awakening interest in the subject of tuberculosis and its prevention, the idea was conceived that a well-chosen exhibit installed in a railway coach and sent over the railroad lines in charge of a qualified staff would very likely prove to be the most effective form in which such an object lesson could be presented to the public at large.

With this end in view the association early in 1908 made overtures to the State Board of Health suggesting cooperation and joint effort to accomplish this undertaking, but as an outcome difficulties appeared and the negotiations were brought to a close.

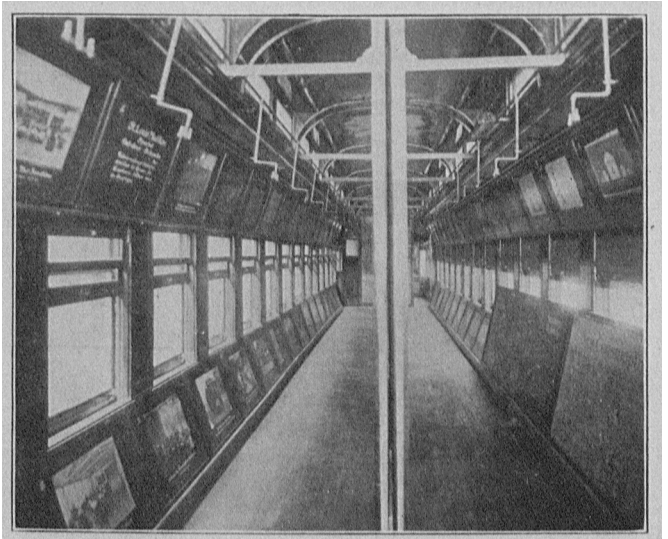


Fig. 2.—Interior view of antituberculosis car.

The project, however, was not lost sight of and endeavors were made to secure funds for this purpose, which hope was realized last June when the announcement was made in the Section on Preventive Medicine and Public Hygiene at the annual meeting of the American Medical Association in St. Louis that a check was in hand ample in amount to cover for a limited time the expenses involved in the equipment and operation of the contemplated railroad car service.*

The managers of railway systems operating lines in Missouri were at once approached with representations touching the plans of the association, with the result of securing a prompt response from the St. Louis and San Francisco System, a first-class day coach being tendered with a promise that it would be turned out of the shops in complete order to receive the exhibit as planned, with special devices for hanging and lighting, no charge to be made for the car or for hauling it, while free transportation for five persons would be supplied, if desired, this gratuitous service including even gas, ice, etc.

The St. Louis Municipal Commission on Tuberculosis with generous public spirit offered the free use of their valuable framed exhibit, which it was found could be used to superior advantage in fitting out the car, and acknowledgment of this graceful courtesy was made accordingly.

*The donor of this fund was Mr. Adolphus Busch, a distinguished citizen of St. Louis, who is widely known as a generous giver to many worthy causes. The work of preparing the car for the road in all its details was placed in the hands of a subcommittee composed of Mr. J. H. Lynch, treasurer of the association, Dr. James Stewart and Mr. Robert J. Newton, secretary of the Municipal Commission on Tuberculosis. Miss W. Doyle, assistant secretary to the association, served as advance agent to the car.

The final details respecting the supervision, equipment, routing, etc., of the car were completed toward the end of July, and August 1 was fixed on as the date for starting, a time schedule having been prepared by the officials of the road which covered twenty-four days and provided for stops and demonstrations at thirty-eight towns and cities located in twenty-eight different counties.

It was decided that the offer by Dr. James Stewart, medical supervisor to the St. Louis Board of Education, of his services free as lecturer in full charge of the car be gratefully accepted, and he was provided with a paid helper to look after the property, work the stereopticon and give aid in other ways as required, sleeping quarters being provided for him in the car. It was arranged further that the assistant secretary should travel from five to seven days in advance of the car and make all necessary arrangements for the meetings with the local people at the designated stopping places, getting at once in touch with public officials, physicians, newspaper men, clergy, business men, club women, etc., notices being regularly mailed ahead stating what was desired by her.

The car left St. Louis as per schedule going southward through territory bordering on the Mississippi River to the extreme southeastern part of the state, thence westward along the southern slope of the Ozarks to Springfield and the thickly peopled lead and zinc mining districts of southwest Missouri; then northward along the western border to Kansas City, where two days were spent, the exhibit being removed from the car to the business center of the city. Returning to Springfield by another route, St. Louis was reached by the trunk line of the Frisco system, the schedule having been extended four days in response to a popular demand for more time at different stopping places, the tour closing August 28.

On its second tour the car left St. Louis September 7, via the Missouri, Kansas and Texas system, the plan being to traverse the entire central part of the state from Hannibal on the Mississippi River to St. Joseph on the western border, covering both sides of the Missouri River and visiting some of the oldest and most thickly populated parts of the state. The return route was to be by way of the Rock Island railroad, this system equaling the others in the courtesies and services freely extended. The success of this further undertaking seems undoubted as increasing attendance at lectures, with financial support, and growing public interest have uniformly marked its course.

In fitting up the car the space was utilized to the utmost by the device of a partition lengthwise in the center formed of framed pictures hung back to back, as imperfectly shown in the accompanying illustration. The end and side walls were also fully utilized, and on shelves and in lockers an ample supply of literature, buttons, post cards, sanitary folding cups, etc., was to be found.

The association was fortunate in securing the services of Dr. Stewart for this work, who, as a former member of the Missouri General Assembly, was successful in securing legislation providing for the state sanatorium now located at Mount Vernon. A part of the purpose of this tour was that every proper effort should be made to meet the candidates for the legislature in each county and explain to them the objects in view, and by thus

interesting them and their people, to secure support for such recommendations on public health lines as may be submitted to the legislative body by the Governor at the session which opens next January, and in this direction much encouragement is reported as a result of the trip. Indeed, it may be claimed with justice, that for a venture which, so far as known, stands unique in its character as a pioneer effort, the undertaking was a conspicuous success, large and interested gatherings being the rule, tuberculous people in rural parts sometimes traveling as many as thirty or forty miles to reach the car in the hope of learning something of benefit to themselves.

It is evident that the higher officials of some of the leading railway lines are beginning to realize the value of such public teaching in disease repression, and this fact was plainly shown in the cordial zeal and skill with which this undertaking was promoted down to the minutest details by Mr. A. Hilton, general passenger agent of the Frisco road, supplemented at certain points by the Saint Louis Southwestern, and the Missouri Pacific railroads, reaching in all a population, not including Kansas City, of nearly a quarter million of people, 1,248 miles being traversed in the tour of the car.

The Missouri, Kansas & Texas Railway management have tendered to this association every facility at their disposal for the operation of the exhibit car over their lines, by means of which a very considerable additional population can be reached, and it is hoped that all the other systems will see the advantage of like action in the warfare against consumption.

A keen interest in public health affairs could have been the only inducement which led the governor of Missouri, Hon. Herbert S. Hadley, to consent to accept the presidency of this association, and this interest was shown to a still greater degree by the official naming of a commission of twenty or more citizens of this state whose duty it will be to make thorough inquiry respecting tuberculosis in Missouri, and frame a report on which he may base recommendations to the legislature for remedial action next year.

While it was found that a considerable financial outlay is involved in the operation of such a traveling exhibit, even when much necessary service is rendered free of charge, still it is firmly believed that the returns to the public in the form of a better knowledge of disease prevention fully repays such expenditures, and it is the hope of the association that additional financial means will be forthcoming to enable this form of instruction to be pushed into every part of the state where the railroads penetrate. Thus far practically the whole burden of this work has been borne in St. Louis, and the available funds of the association have been exhausted in the enterprise herein sketched.

As before indicated, much of the best help and cooperation at the different points was given by the organized medical profession, officials of local societies, councilors, and the president of the state association, Dr. H. E. Pearse, all lending a hand with full sympathy and good will to forward the cause. A number of leading physicians along the route even volunteered their services for work with the car if future tours were found possible. Another factor making for the success achieved was the public press, many of the papers giving columns of space to descriptions, with pictures, etc., showing the work and purposes of the car.