

The Chicago-Jericho Line.



PERHAPS the most extraordinary railway in existence is one established in the garden of an English clergyman—the Rev. Harry Lancelot Warneford (1), of 5,

Osborne Terrace, Windsor, whose skill as an amateur engineer is only equalled by his success as a composer of music. Photographs of this unique system will be found reproduced in this article; and even from these it is pretty obvious that this miniature railroad is marvelously complete, including all the wondrously ingenious appliances devised to insure safety on the great railroads of the world. Everything about this line is peculiar. It bears the imposing title of "The Jericho and Chicago Railway," and a novel departure is contained in the announcement, that "only first and fourth class passengers are carried." The entire line is exactly 100ft. long, and there are three stations—Jericho, Crewe, and Chicago; the gauge is $2\frac{5}{8}$ in. broad. It is proposed to convey here, in a few words, some adequate notion of the extraordinary minuteness of

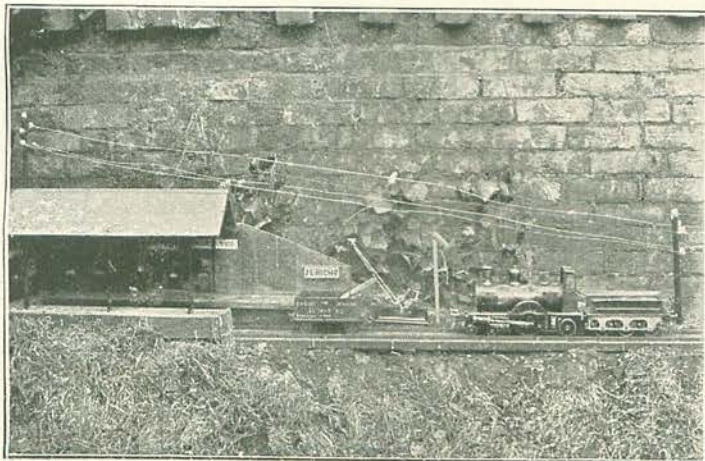
technical detail which characterizes this tiny system.

The next photograph shows Jericho Station (2), which, despite its Oriental savour, is adorned with miniature advertisements of a truly English, not to say, Metropolitan, kind. This station is about 2ft. 6in. in length, and at one side of it is a large lever which works the signals all up the line. In this model station there are waiting-rooms and every convenience for passengers; while between the buffers of the stop-block may be seen the button of an electric bell, which, when struck by the beautiful little locomotive, automatically announces the arrival of the train.

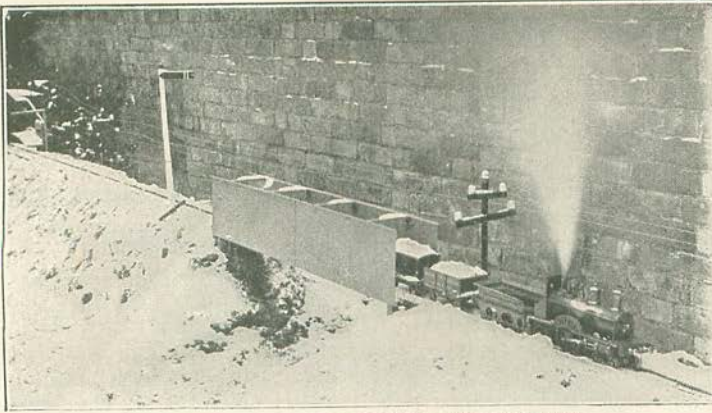


1.—THE REV. H. L. WARNEFORD,
"Superintendent of the Line."
From a Photo. by Russell & Sons, Windsor.

rotted the sleepers. The present bankment is scientifically constructed of alternate layers of earth and ashes, thus insuring efficient drainage. We are assured by Mr. Warneford that there is not a single nail used throughout the whole railway. It is also necessary to mention that the indefatigable superintendent comes of an engineering family: hence this delightful and amusing hobby. All along the line are "mile posts," exactly 10ft. apart; and indeed, everything is carried out exactly to scale. There is even a tunnel gauge—a familiar feature in railroads, but one whose use is seldom if ever comprehended by the general public. The tunnel gauge consists of a semi-



2.—THE STARTING-POINT—JERICHO STATION.



3.—VIEW OF THE EMBANKMENT AND TUBULAR BRIDGE.

circular piece of iron suspended from a cross-bar. Trucks loaded with goods may be run under this half-hoop, which is the exact height of the tunnels on that particular line. If the piled-up goods touch the gauge anywhere the load has to be diminished. Obviously, then, if there were no tunnel gauges, trucks might be loaded up to such an extent that they would not pass through the tunnels, and would thereby be a source of considerable danger.

On the Jericho-Chicago system there are, of course, beautifully constructed cranes for dealing with "heavy goods"; and a specially made electric battery is concealed at the back of Jericho Station. The signals are marvels of ingenuity; they are weighted with lead, of which 7lb. or 8lb. is used throughout the line.

At about 15ft. from Jericho is a beautifully constructed iron tubular bridge, 4ft. long, and this Mr. Warneford had specially built by an ironmonger in Windsor. This bridge (3) is shown in the next photograph, and it is particularly interesting to notice the steam "splash" against the girders above, as the brave little engine rattles swiftly through. The engine, by the way, has quite a little history, and may be said to have originated the entire railway.

This toy locomotive, which weighs about 14lb. when filled with water and ready for starting, was presented

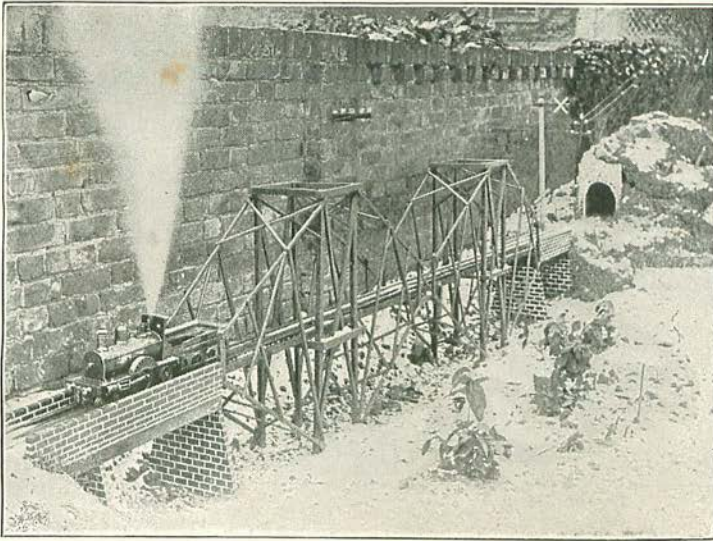
to Mr. Warneford about three years ago by a yachting friend; and the genial minister at once set to work running it for the benefit of his two charming children, to the younger of whom—little Miss Dorothy (11)—has been allocated the distinguished position of "General Manager." Photographs of other members of the headquarters staff will be found reproduced on page 579.

"It would not run on the carpet," Mr. Warneford said, speaking of the locomotive when first received, "because, you see, the wheels couldn't get a proper grip. Later on, however, I took up the carpet and put down wooden rails in the room. Next came the outdoor 'low-level' system, about 60ft. long; and then gradually, as in the case with more ambitious railways, the Jericho-Chicago line extended itself until it attained its present proportions. No doubt it would still grow, were it not for the two 4ft. walls which mark the boundaries of our garden."

At about 23ft. from the starting-point is an admirably equipped signal cabin, containing six levers. "The operator is not in just now," explained Mr. Warneford, facetiously, "he is undergoing repairs—being operated on himself, you know!" Outside the signal cabin are little white posts, on which are painted the necessary gradient marks;



4.—SIGNAL CABIN, AND SNOW-FILLED CUTTING.



5.—THE GREAT CANTILEVER BRIDGE.

they are not, however, visible in the photograph.

The next thing one comes to on this extraordinary railroad is a deep cutting, which is shown in the next illustration (4). When this particular photograph was taken, snow had drifted into the cutting, and Mr. Warneford immediately took the opportunity of running his tireless little engine through a drift several feet in thickness. For this picturesque operation an ingeniously-constructed snow-plough was called into requisition. Over the cutting, it will be observed, there is the usual foot-bridge for the convenience of potential residents on either side of the line. After the cutting, comes the great cantilever bridge (5), in the construction of which Mr. Warneford took for his model the far-famed Forth Bridge. This beautiful little model bridge is 12ft. 5in. long, including the approaches.

We now reach the centre of the line, where is situated the inevitable tunnel. Over the tunnel is a great mass of earth and bricks, which, in summer, is completely covered with gorgeous nasturtiums; and it should be remarked here that the whole length of the track is, for the greater part of the year, gay with flowers of every kind. Just before entering the tunnel, there is a large printed notice to the driver to "reduce speed"; and here, too, is situated the cabin of the fog-signalman—a real triumph of ingenious mechanism. Out of the side of the little cabin (the

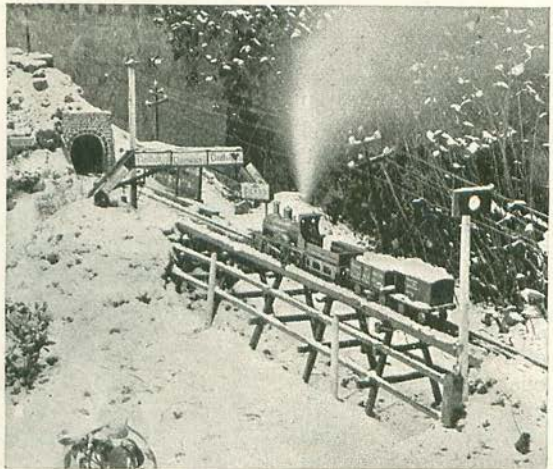
whole of which lifts up on a hinge) projects a short, steel arm, which is struck by the engine in passing. Simultaneously, a weighty iron hammer is acted upon, and this in falling explodes a cap and a small charge of powder. At that moment, too, a quaint little signalman, wearing a blue tie and a harrassed appearance, pops his head out of the window, carrying in his hand a stiff white flag.

It is interesting to note the appropriate muffled "roar" of the train as it passes through the tunnel, on the other

side of which is yet another notice to "Whistle." Just here is Crewe Station.

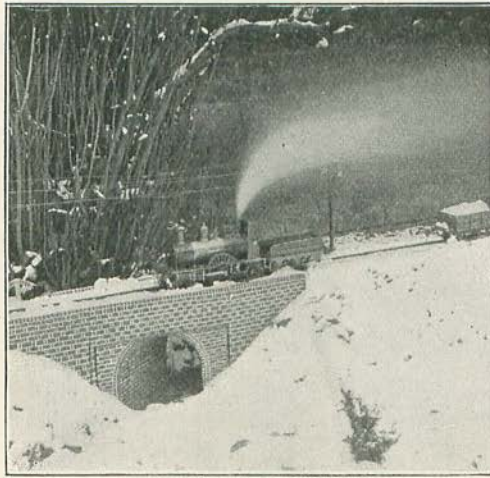
A little further on, the track is carried over a "ravine," on a beautifully made American trestle bridge, 5ft. 6in. long (6). Although unique in many respects, the Jericho-Chicago line cannot claim absolute exemption from accidents. One day the locomotive started from Jericho, and all went well until the tunnel was reached. The "under-manager," Mr. Warneford's little son (12), was in charge of the train, and from him we had better take the exciting narrative:—

"The day was rather foggy, but the fog-signals near Crewe were successfully exploded. We entered the tunnel at a very high rate of



6.—THE AMERICAN TRESTLE BRIDGE.

speed, and when about half-way through, the trucks (the very ones seen in the photograph) "jumped" the rails. I should explain that, on this particular occasion, the engine was pushing, and not pulling its freight. The moment the trucks became derailed they were wrecked, the powerful locomotive literally ploughing its way through them. Eventually the train did come out at the other end of the tunnel, and was there stopped. A break-

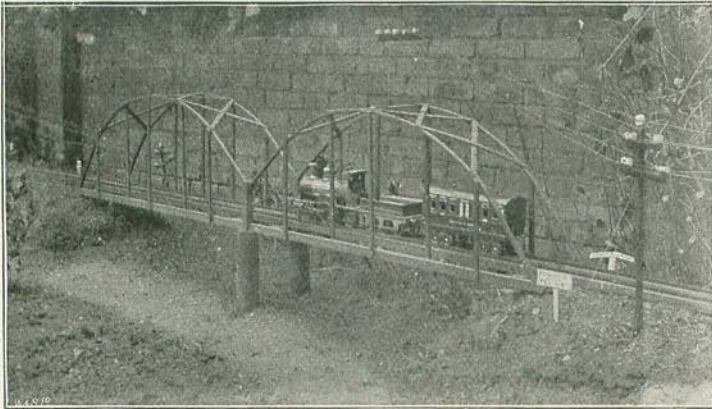


7.—THE "SKEW ARCH" BRIDGE.

down gang was quickly on the scene,

into the lamp reservoir beneath the boiler.

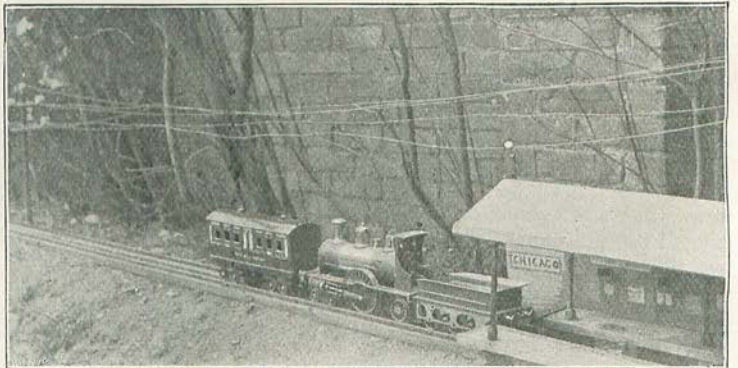
Asked as to record runs, Mr. Warneford replied that a train has run from Chicago to Jericho in ten seconds—truly an astonishing performance! On one occasion, however, a number of people were present, and Mr. Warneford, as Acting Superintendent of the Line, had his attention diverted from his duties. As a consequence, too much steam was generated, and the engine simply raced away at dizzy speed! It seemed to throw everything on one side, including its own tender, which it hurled down the embankment. The wheels of the



8.—THE DOUBLE SUSPENSION BRIDGE.

and the main line was cleared in a remarkably short space of time."

The next bridge on this wonderful system is what is known as a "skew arch"; it is shown in the next photograph (7). This bridge is 2ft. 6in. long. There is, besides, still another bridge—a double suspension affair (8), copied from one over the Thames on the Great Western Railway, just outside Windsor; and near this bridge there is the



9.—THE CHICAGO TERMINUS.



10.—MRS. WARNEFORD.
"The Chief Inspector."
From a Photo. by Edmund Wheeler, Brighton.

tender were picked up in various parts of the garden; the engine itself was derailed close to the Chicago terminus (9), having run the full length of the line in six seconds! Dear us! Dear us!

Mr. Warneford very justly dwells upon the astonishing amount of detail which has been introduced into his miniature railroad. The signals, for example, are not only correct in every respect, and worked by levers and wires, but they are properly guyed down and have tarred bases, so as to prevent the rotting of the wood.

"When we abolished the low-level and commenced on the embankment," remarked the designer-in-chief, "it became necessary for me to have at least one navy. I lighted upon a young pupil of mine (now in the H.A.C.), who stands about six feet in his socks; and it may amuse you to learn that he had to use the doll's wheelbarrow while at work."

Naturally, the fame of this tiny railway has got

abroad, and many people come to see it, including Mr. Warneford's own school-children, to whom it serves as a particularly useful object-lesson. On occasion, a 14lb. weight is placed in the tender of the locomotive. Among the passengers, or rather spectators, have been Prince Alexander and Princess Ena of Battenberg, who came along one day from Windsor Castle to see the railway and honour Mr. and Mrs. Warneford with a long visit. Naturally, the children were highly delighted at what they saw, and the little Prince made Sir John Cowell promise to bring him a second time. "The second time Prince Alexander came," remarked Mr. Warneford, "he was far less shy. He asked many intelligent questions, and manifested a desire to actively superintend the railway."

The photographs which illustrate this article were specially taken for us, and it will be agreed that, were one unaware of the facts, one would certainly imagine that these were views of a real railway, taken from a considerable distance. At the same time it is necessary to bear in mind that the wall, seen in the background of most of the illustrations, is only about 4ft. 6in. high.



11.—MISS DOROTHY WARNEFORD.
"General Manager" of the Line.
From a Photo. by Edmund Wheeler, Brighton.



12.—MASTER WARNEFORD.
"The Under-Manager."
From a Photo. by Alfred D. Kissack, Elton.