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*The Miniature*

# LOCOMOTIVE

THE LIVE STEAMERS' MAGAZINE





# GAUGE DILEMMA

## ANOTHER ANSWER —

By Johnny Cumlately

Having perused the two articles appearing under the above heading in recent issues I began to wonder what all the shooting was about. Thinking it might be some new form of flying "China" I opened our one and only dictionary to find what a "dilemma" could be. Imagine my astonishment when I read—"a necessary choice between equally undesirable alternatives." Brother, that did it! I knew that I had to get my say in before the Battle of Words got too thick cause I'm kinda slow with the BIG ones, so here goes—

The answers to the questions fired at random by Mr. Booth were both simple and obvious to me, but after dodging through Mr. Smith's answering fusillade it was obvious that some of the Brethren, Live Steam that is, did not see these simple answers as I did. So-o-o, grabbing some white flags for this ole teakettle I hope to prevent a full "scale" feud from bursting forth by offering these "simple and obvious answers."

First: Correct gauge for  $1\frac{1}{2}$ " scale is  $7\frac{1}{4}$ " as established by English standards many years ago and used there ever since.

Second: Super-accurate or actual scale model built for  $7\frac{1}{4}$ " gauge should be built to a scale of  $1.69/128$ " to 1'. This scale would follow the precedent as set in England of using a scale of  $17/32$ " to 1' for scale models being built for  $2\frac{1}{2}$ " gauge.

Third: Why the English model group long ago set the standard of  $7\frac{1}{4}$ " gauge for  $1\frac{1}{2}$ " scale I do not know and to date have been unable to find any clues in my books and magazines. Perhaps we have a reader who can enlighten us on this point.

Fourth: Any gauge is easy to measure regardless of dimension if a properly constructed track gauge is made to use when laying rail. The track gauge should fit loosely between the rails and never tight. Our practice has shown that for permanently laid outdoor track the variation over gauge may be as follows;  $1/8$ " for  $1\frac{1}{2}$ " scale, and  $3/32$ " for  $3/4$ " scale. Of course scale thickness wheels are not being used.

Fifth: Now comes the \$64 question—Why  $7\frac{1}{2}$ " gauge for  $1\frac{1}{2}$ " scale? Here is the long, but simple answer: first for a little background let's review some items from the Modelmaker, published by Spon & Chamberlain, 1924-1935, then

by a Wisconsin corporation, 1936-1939. In Vol IX, issue No. 2, dated February 1932, page 50 is an article titled, "A 7" P.R.R. K 4 s Locomotive" by Mr. Calvert Holt, which starts, "The writer was commissioned to build a 7" gauge locomotive to be a Pennsylvania 4-6-2 K4s model  $1/8$  full size." Further along in the same volume issue No. 9, dated September, 1932, on page 303, is an article titled, "A P.R.R. K4s Locomotive,  $1\frac{1}{2}$ " scale—7" gauge" by Mr. W. Edmunds Spon. The third paragraph starts, "The trials were run over a track consisting of standard factory rail laid to a 7" gauge etc." and following on page 305 under Specifications the second item is "Scale,  $1\frac{1}{2}$ ", 7" gauge; (These two quotes, one by the builder and one by the editor of the publication should establish the fact of  $1\frac{1}{2}$ " scale, 7" gauge.) but, here's what we find in the same volume, issue No. 12 dated December, 1932, on Page 399 in the publisher's column titled, "Our Foreword," paragraph 7: "As far as we know the most outstanding Model of the year is the fine steam locomotive 'Miss Bay Shore' a P.R.R. K4s  $7\frac{1}{4}$ " gauge built by Mr. Calvert Holt for a private customer."

Let's jump the "Pond" for a brief look at "The Model Engineer & Practical Electrician," Volume 67, issue No. 1641, dated October 20, 1932, page 368. Appears here an article titled "Shops, Shed & Road, A column of Live Steam" by L.B.S.C. (Now, says many of us, THIS man we can believe!) which is headed "Calvert Holt Sees It Through" and continues, "Soon after that never-forgotten and ever-regretted Sunday night when my wife and I said good-bye to friends Calvert Holt and Joe Lozier at the New York pier, the former wrote that he was just about to start on a  $7\frac{1}{4}$ " Pennsylvania K.4 Pacific." The article goes on to describe 'Miss Bay Shore,' Engine No. 7643 in detail and the pictures accompanying are similar to those in The Modelmaker article in issue No. 9.

That's enough for background, let us return to The Modelmaker for the meat-of-the-nut so to speak—in Vol. XII, issue No. 6 dated June, 1935, page 207, appears an article titled "Outdoor Railroading in Southern Michigan" by H. P. Shaw. It starts as follows: "As the writer is a firm believer in home workshops and home recreation the following description of my  $7\frac{1}{2}$ " gauge railroading activities is intended as a, etc." And in the third paragraph, second sentence; "A scale of  $1\frac{1}{2}$ " was selected as being the smallest a person could really ride on and still maintain their self respect." This article goes on to describe track and car construction.

What a "dilemma" for the uninformed lone-wolf builder of the 1930's—the

printed word gives for  $1\frac{1}{2}$ " scale three gauges, 7",  $7\frac{1}{4}$ ", and  $7\frac{1}{2}$ "!

To continue, in The Modelmaker, Vol. 15, issue No. 3, dated Feb-Mar. 1938, page 88, is an article titled "The Whysall Light Railway" by H. P. Shaw in which he describes a larger locomotive and states, "This is on a scale of  $1\frac{1}{2}$ " to 1 ft. No mention of gauge but the picture of locomotive and cars accompanying the article will be of interest to Mr. Booth. Both he and I know that they run on  $7\frac{1}{4}$ " gauge track NOT  $7\frac{1}{2}$ " as stated by H. P. Shaw in his first article

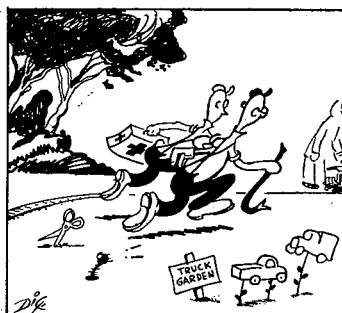
Soon after the first article appeared, a "lone-wolf" builder interested by Mr. Wolf's remarks on  $1\frac{1}{2}$ " scale equipment corresponded with him in regard to problems of construction and especially as to "correct" gauge, 7",  $7\frac{1}{4}$ ", or  $7\frac{1}{2}$ " and was told the article was correct in stating  $7\frac{1}{2}$ " gauge. This lone-wolf being a "Doer" and not a "Talker" type of person started at once on the machinery for a locomotive and  $7\frac{1}{2}$ " gauge was on its way. Thus the simple reason for  $7\frac{1}{2}$ " gauge was Mr. Shaw's first article plus his later verification of the article's accuracy as to gauge dimension. From that time until 1942 when I first met him his acquaintance with Live Steamers spread, and believing Mr. Shaw's statement to be correct he boosted  $7\frac{1}{2}$ " gauge for  $1\frac{1}{2}$ " scale to every one interested in this large size. Being a good salesman and very good correspondent he naturally caused this gauge to spread thru the Mid-west and West. Since 1946 when we really began to get acquainted he and I have argued this gauge question frequently and have come to the conclusion that no real harm is done as long as each local group sticks to the same gauge.

There it is boys, all down in black and white, my simple and obvious answer.

With the editor's permission I would now like to play lawyer for a few words and plead the case for all true Live Steamers; we who build small locomotives do it for many different reasons, but there is one which is common to all of us, the pleasure we derive from the hobby; therefore let us keep our sense of humor when discussing facts pertaining to our hobby, keep our purely personal opinions to a minimum, and not allow any "Prima-donnas" to develop who insist on running the whole show their way and end up by ruining it for most of us. Those of you now in or who have been in clubs will know the type of person I am referring to.

This answer has grown longer than anticipated so I will close with a few brief comments on the two articles; I disagree with Mr. Booth's statement that a fraction of an inch is preventing interchangeabil-

## TINKER and CLINKER



ity (Boy! That's a big 'un!) of rolling stock and motive power. I believe it is the Weight! I'm just a little guy that finds a  $\frac{3}{4}$ " scale locomotive a big job to tote around let alone 200 to 1400 pounds of  $1\frac{1}{2}$ " scale stuff. Granted it can be done easily with the proper moving equipment but most of us do not have access to such. May I remind Mr. Smith; first, that although some few scale models have been constructed that are actually working models, and very good too, all detail parts and conditions are not to scale as L.B.S.C. has pointed out so many times; second, that most Live Steamers build "small locomotives" not toys, models, nor scale models. We want locomotives that perform day in and day out with a minimum of repair and that look in fair proportion to the large ones. When repairs are needed we want to be able to do them quickly and with a minimum of trouble. Therefore we must design our small locomotives to come within these general specifications and in so doing will take care of the details of clearances and lateral of wheels and rods with guides, cylinders, frames, etc., that would be necessary for operation thru a given minimum radius curve. As to standards for our Live Steam hobby Mr. Charles A. Purinton proposed such in "Roundhouse Topics" page 31 of The Live-Steamer, Vol. 1, issue No. 6, dated November, 1950, and I for one am in complete agreement, even to the extent of actively serving on a committee to formulate such.

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