

# TECHNICAL TALK

by P. WILSON

## Pamela

I have just had three nights out with Pamela. To avoid misunderstanding I hasten to explain that this is the name I have given to the Baby Pamphonic Reproducer. Why one should give an instrument of this kind a pet name I cannot guess; why it should be a feminine name puzzles me still more, for there is something about Pamela that inspires complete confidence. But I am getting on to dangerous ground again. . . .

The occasions of our better acquaintance were the performances of Zangwill's play, *The Melting Pot*, by the Board of Education Co-operative Theatre; and the place was the theatre of the Guildhall School of Music. I was asked to provide the "noises off" as well as to take the place of the orchestra before the rise of the curtain. My own amplifier equipment, like the shoemaker's shoes, being in course of reconstruction, the Pamphonic people kindly came to my rescue with Pamela.

It is not often that one gets the opportunity of testing a power equipment in a theatre and before a critical audience. Naturally I was particularly grateful for the opportunity of showing off Pamela; and show off she did in the most approved fashion. You never saw such airs and graces, all carried off in an effortless way and as to the manner born. And when she really let herself go, or rather when I permitted her to make as much noise as she liked, all the visitors looked round in awe and wonder. I have never been so captivated with a little lady in my life—well, I had better say not since I was married; for, you see, all my babies were boys.

From all of this you will gather that I have now become a Pamphonic enthusiast. The trouble is that it is my duty to be critical and that is a difficult thing for a real enthusiast. I don't want to pull Pamela to pieces, not even to tell other people how she works. I want to take her just as she is. That, after all, is what you will want to do when you see her or hear her: just take her—I almost said for better, for worse. But this sentimentality will not do in one who is supposed to be writing technical notes.

What then is Pamela? Described bluntly and cold-bloodedly, she is simply a two-stage electric amplifier mounted on a sort of step-ladder inside a large loud-speaker baffle. The baffle happens to be arranged in cabinet form so as to present the appearance of a handsome piece of furniture; and, of course, the electric pick-up, motor and speaker are there as well; but these are more commonplace features, or at any rate the pick-up and motor are, the former being a standard Marconiphone (last year's model with magnetic damping) and the latter a Garrard Induction. The loud-speaker is a special model of the Epoch cinema type, huge and massive and efficient. But the amplifier is the really interesting part of Pamela's internal organisation. First of all she has a tone-corrector circuit between the pick-up and the first valve, which is of the indirectly-heated type and is fed with H.T. from its own mains unit. The coupling between this valve and the output stage is of a special kind being pure resistance coupling (without condenser or grid leak) and arranged in such a way that the H.T. for the first stage acts as grid bias for the output stage, a dry battery being used to adjust to the proper value. With this arrangement there is no loss of high notes or of low notes nor any distortion of transients. Well, perhaps that is going a little too far, since even the Varley wirewound resistances that are used have some self-inductance and some self-capacity. It is, however, quite safe to say that the loss is less than in any other type of coupling. The output valve is the Mullard

DO 75 and arranged in this way has an A.C. undistorted power output of some 18 watts. No wonder Pamela can make herself heard.

I like this generosity. I like, too, the lavish way in which only the best possible components have been used, the ample margins of safety everywhere and the neat and ingenious layout. Just figure it out: a two-stage amplifier with two independent mains units, each generously smoothed, and a separate L.T. rectifier to provide D.C. current for the speaker field.

But what I like most of all is the excellent quality at all volume levels except the very lowest, which is a mere whisper. There is deep bass, very deep, and very high treble. Some records I played sounded "cattish," and they are; and here the tone control came in very handy in disposing of all the nine lives. I will not say that the quality cannot be improved upon, for I know that it can and has been—in the Senior Pamphonic, for instance, and, I believe, in my own new equipment the gramophone end of which is now working. But I do not know of any other instrument of this power on the market at present which can be compared with it. There may be special products which come in the same category; I remember a special 20-watt amplifier built by Mr. Godfrey some time ago for use in Egypt which thrilled me at the time. But Pamela is now a standard model—a high standard and a good model.

I am glad to think that I am by no means alone in my high opinion of these Pamphonic Reproducers. The fact that, although Mr. Taylor and his colleagues have only been working at them for a little over six months, they have already equipped nine of the largest London theatres, including Drury Lane, the Coliseum and the Dominion, is a better testimony than any remarks of mine. *Macte virtute.*

## Captain West's Cantor Lectures

I made some remarks on Captain West's Lectures a year ago whilst they were being delivered. The full paper is now published (price 3s.) by the Royal Society of Arts (John Street, Adelphi, W.C.2). I had intended to discuss some of the features this month; but "Pamela tempted me" and now I must postpone most of what I have to say. But if you are at all interested in the technique of sound reproduction, do not omit to get this book. If I mistake not, it will soon be out of print. The title is: "The recording and reproducing of sound." The range covered is remarkably wide and includes talking film technique as well as purely gramophone and radio-gramophone matters. Many aspects only get a passing reference, it is true. But such references are always very much to the point and are usually illuminating. The most interesting sections, to me, are those dealing with studio and room conditions: design of studios, effects of reverberation and echo, the reason why a microphone cannot be placed in "the best position for listening," as judged by aural means, and so on.

★ ★ ★

It was only fitting that "Britain's Successful Industries No. 1," which appeared in the *Morning Post* on April 14th, 15th and 16th, should have been The Gramophone Co. Ltd. (His Master's Voice). So much interesting information was included in this lengthy tribute that it is to be hoped the articles will be reprinted by H.M.V.