

# THE EXPERIENCES OF A RECORDER

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## HOW A VOICE IS RECORDED

Though it is the business of the dealer to vend records, still, I venture to remark, few ever pause to consider how master-records are obtained and transferred to disc or cylinder as the case may be. The skill required to secure the natural tone quality of the artiste, the great amount of labour required to produce the multitudinous records which are sold in every corner of the globe, the fees paid to artistes, which alone runs into many thousands of pounds per month, and other similar incidentals with which the record producer has to be *au fait*.

Before going any further it is as well for me to state that I do not propose to give a detailed description of the various technicalities encountered in the actual recording of the human voice, but what I will give is sufficient data to enable the reader to understand how the result is obtained—just a concise account of how a voice is recorded.

Primarily, trials are heard and made of several artistes to secure what may be termed a recording voice. Not all voices are suitable; some of our most popular artistes fail to make a satisfactory commercial record. There are many reasons for this. A voice may be too weak or too nasal and in another the enunciation too bad and so on, but if an artiste is selected as entirely satisfactory, he will receive a song or two to study prior to making a record. The musical director of the company then ascertains the key which suits the artiste best, and proceeds to orchestrate for however many musicians are considered necessary. This is usually twelve, and then a date is arranged for the making of the record. We will now suppose the artiste and musicians to be in the recording room in the hands of the recording expert. The musicians are all, of course, men well-versed in recording and require little or no instructions from the recorder.

The artiste, however, providing he is not an old hand at the game, requires such advice and attention of the recorder. Artiste and orchestra proceed to rehearse and time the selection and this over the recorder places his artiste a few

inches in front of the horn. Immediately behind and around are the musicians, arranged as the recorder may desire. In all cases the reed instruments are nearer to the horn than the brass. All instruments have to be carefully focussed to the mouth of the horn, otherwise the result would not be properly balanced. The orchestra now play the introduction, during which the artiste leans away in order to enable the bandsmen to play right into the horn without the vocalist's head obstructing, as is the case when he is singing. This over, the artiste commences to sing, with the recorder in close attendance to ensure evenness in strength. The voice—or sound-waves—travels down the horn, through the special rubber attachment, through the trunnion supporting the diaphragm, on to the diaphragm itself, thereby vibrating the recording glass, which in turn vibrates the sapphire, cutting the indentations or sound-waves into the fast revolving disc or cylinder.

Such in brief outline is what goes on when a voice—or for that matter any other series of sound-waves—is recorded. And this, I hope, will be intelligible to the reader, though to throw better light on the process I have sketched a rough outline of the recording apparatus, and refer the reader to the illustration.

Now, as I said before, the recorder has to lightly hold place his hand on the singer's shoulder—during the singing, for on a loud note it is sometimes necessary to take the artiste a few inches back from the horn, and on a subdued, or low, note nearer to it. After the completion of a selection the record is scrupulously cleaned of wax chips, and tested in the presence of the recorder, musical director, conductor, and artiste. Faults are found and remedied, and suggestions made as to improvement, after which another record is usually made of the same selection. If there should still be faults after the second attempt, the process is again gone through until a satisfactory record is obtained.

We will now assume that a good record has been obtained. The next step in the process is its passing. When a record is passed as being good technically and artistically it is numbered and carefully packed away preparatory for transit to the factory, and the next selection taken.

Several tests are made by the recorder of the artiste's voice with separate diaphragms and horns for the purpose of securing the diaphragm and horn which is most appropriate for the particular artiste. Each horn gives a different tone, and each diaphragm possesses a particular quality. Horns are used which can make a

voice sound thin, tubby, or weak; diaphragms, too, appear to have their idiosyncrasies. One may be excellent for an orchestra, but useless for a soprano. Another good for a soprano and bad for a tenor, and so on, This, however, is not the case with the few good experts who are making records. A diaphragm should be made to record all selections, even as the human ear hears all sounds in its proximity.

The diaphragm is the chief item in recording, and the most infinitesimal raising or lowering of a sapphire in its holder will alter the whole tone of a record. The diaphragm which cuts exactly in the centre of a record may result in obtaining a thin tone, whilst cutting one-sixteenth in front or behind the centre will produce a fine round tone.

Such are but a few of the technicalities a recorder should know. For recording a military or full band selection the orchestra is augmented, and a band of twenty to twenty-four men as usual for such numbers. I have, however, recorded as many as fifty instrumentalists abroad, and in some cases one hundred musicians have been recorded at one time. In these instances a much larger horn is used and the machine generally lowered to obtain a fuller tone.

The same difficulties are encountered as with vocalists, for several tones can be obtained, therefore trials have to be made to ascertain the most natural of them. one of the most difficult tasks, however, is the placing of the musicians to obtain a good balance. The musicians chosen for the talking machine, by the bye, are the best possible to find in the town where one may be recording. Ordinary musicians are of little use, for it is a severe test to play such selections as "*Tannhäuser*" repeatedly before a satisfactory record is secured. Furthermore, the slightest mistake made will damn the record, and the whole selection has to be played through again and again until it is made without error.

In the theatre should a mistake occur it is passed, and soon forgotten, but on a record it is always there, an irremediable flaw which is repeated on each occasion that the record is played. I have known musicians to play for three consecutive hours such selections as "*Introduction to the Third Act of Lohengrin*," and other numbers, several times over.

After having secured a number of master records they are sent to the factory, where they are placed in an electric bath ;for the purpose of having

matrices made from them. From these matrices are printed the commercial records. The first print made is sent to the recorder to test as to whether it is to pass or be condemned, for after a record is sent to the factory, a matrice made, and a print obtained, it may lose some of its quality. The surface may be too rough, the matrice overpolished and so has erased a considerable amount of tone, or the matrice may be scratched. All these multifarious faults are carefully attended to, and another matrice then made, or should the original master wax record be spoiled, the selection will have to be recorded again until satisfactory prints are obtained for selling purposes.

I have endeavoured to explain in rough outline the duties of the Recorder at home. His duties, however, do not always end there. Often he has to travel the wide, wide world, as I did, in search of his quarry.

## I LEAVE TO RECORD IN RUSSIA

At the time of starting on my first visit to Russia I spoke I no Russian, and was therefore extremely fortunate in meeting a fellow countryman whose destination also was Moscow. After a comfortable trip across the North Sea I arrived at Flushing, at 4 a.m., where, by the way, the meeting with my companion occurred. After a very tedious journey through flat and uninteresting Holland, and subsequently through the busy, smoke-emitting prosperous towns of Germany, we arrived in Berlin at seven in the evening.

The German trains are comfortable, but have a most unpleasant swerve when crossing points, causing many people what is known as train-sickness. I had barely fifteen minutes before the train for Warsaw was due to leave the same platform. Soon after leaving Berlin the weather became exceedingly cold, and I had to resort to my fur coat. The carriage through the strange negligence of the officials, was not heated and my plight can be better understood when I say the thermometer registered eight degrees Reamur<sup>1</sup>. In eight hours the train arrived at the Polish-Russian frontier, the town of Alexandrovo, where I had to surrender my passport to the police officer and gendarmes, who entered my compartment.

1 Réaumur is the Continental Standard of thermometry. Eight degrees Réaumur is roughly equivalent to 49½ degrees Fahrenheit. – ED.

No person is allowed to leave the train before the police have collected every passport, and carried out a severe scrutiny of all travellers. In the event of a man or woman not possessing one of these important documents they are immediately sent back to Berlin, or at least to the nearest town where they will find one of their Government's Consuls. The collection over, we were allowed to alight and bidden to attend in the large Custom Hall, to open our baggage for inspection. I discovered my baggage in a large, dirty, desolate and cold hall, filled with passengers of all sorts and conditions of humanity, the majority (myself included) abusing the lethargic manner the Russian officials proceeded with their work.

During the scrutiny of the luggage the passports are being thoroughly examined. After waiting for over an hour in the dismal hall a police official arrived from an ante-room, with a number of passports in his hands, which I learnt afterwards were passports that had been passed. (Occasionally a person is detained on suspicion, and compelled without any tangible reason to wait a day or two before obtaining permission to proceed on his journey, after which no excuse is given by the police for their apparent wrongful detention).

The official then proceeds to call out in a raucous voice his conception of the names of the owners on the passports. The Russian traveller gets through with this matter comfortably, but the foreigner has great difficulty in recognising his own name as rendered, murdered, and defiled by this ignorant Russian. I emphasise *ignorant*, for in Russia there are many people in every town who speak English, French, and German and it is therefore astonishing that the Government are content to continue with the services of such illiterate employees. It is nevertheless amusing to note the expressions of utter abandonment and perplexity written on the face of the foreigner who endeavours to decipher his name from the jargon which the official emits !

I heard with others the name *Pob-lee* repeatedly called without a claimant. I never realised it was my own name until all passports had been given out, when my friend asked to examine the passport of *Pob-lee*, for we had seen that it was a British passport.

On receiving it I was met with looks of envy from at least five men who were to be detained, and were at that moment being arrested; for what reason I was unable to discover; two were Germans and three Russians. I hoped that the

reception at the door of "*Holy Russia*" was not the forerunner of similar discordant experiences to encounter.

I alighted from the train at Warsaw at eight o' clock; we had been left Alexandrovo four hours, so that I was feeling fatigued. It was snowing hard, and was bitterly cold. The first step now was to obtain an Isworshic or cab to drive across Warsaw to the Mosskovsky "*Vauxhall*," there to take the train for Moscow. One of the most annoying difficulties confronting the traveller, and where a person not speaking Russian is nonplussed, is to obtain a cabman and make him understand where you desire to be taken. Furthermore it is an almost obsolete custom in Russia to make a price with a "cabby" before hiring him. Suppose you have succeeded by repeated attempts and gesticulations, in making him understand where to drive, the price he will demand, by a display of the fingers, will be frightfully exorbitant. My companion, for example, after bartering for quite five minutes in the snow with a number of expostulating cabmen who were shouting and yelling prices, and showering encomiums upon their respective horses obtained one for a rouble and a half (about 3s.) amidst the curses and invidious glances from the others, all of whom had crowded round yelling at the same time unintelligible language. On my arrival at the Mosskovsky Station I conversed with two Frenchmen and a Swede, who were both reluctantly compelled to pay eight and six roubles respectively. In subsequent trips with my wife, however, I never paid more than one rouble.

The reader might ask, "*Surely the Police interfere on your behalf?*" No, they do not, but they certainly do on *their own* behalf.

In the event of a dispute with a cabman over an excessive charge, there is a mutual agreement between policemen and cabmen as to percentage the former receives of your money. The policeman may, on receiving a small bribe, reduce the fare one rouble; he still receives his percentage and also your bribe. You will see it is obvious that the police are not assisting you in any way, but are merely acting for themselves and smiling up their sleeves at you for giving them the opportunity of demanding their percentage from the cabman, who, had you not called the

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2 "*Vaksal*" is Russian for "station".

policeman, would have had all the money to himself. You leave unrequited whilst they settle their business !

Should you be staying in Warsaw there is no difficulty whatever, for you simply take a seat in the motor car of the hotel where it is your intention to put up. There is also an interpreter there, but immediately the small bus is full, he is off, and you are left to get through as best as your British head wills.

I was not sorry to be on the way to Moscow, though the view from the train was void of interest, for practically all I saw was an interminable bulk of snow, the whiteness of which is blinding, and in such quantum to be strangely monotonous. The railway carriages are built after the American style of twenty years ago, with the exception that they are not kept so clean. The stations passed are dull brick buildings, with no attempt at design, and there is a singular absence of movement as in England or Germany. One's attention is attracted by the fact that at every halt or station are to be seen gendarmes – specially picked men. At a number of the stations en route peasants are allowed to sell milk, eggs and fruit. The crowd on a platform are drab in appearance, and there is a striking absence of colour which one is apt to anticipate.

The men in their long coats, high boots and peaked hats are rather like children than men, with a strange infantile expression on their countenances. No doubt I should alter my impression of them in their village, but I was disappointed. Nevertheless, of Moscow and Russian artistes I will write in my next article.

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