

(Written for the "Radio Record" by E.R.B.)

OISES off"-not the headache-producing screech and roar that go under the courtesy title of "static," but the effects that give realism and colour to a radio play-are receiving increasing attention from the staffs of national stations. For a great many years of theatrical history the effects department has held a high place of importance off-stage. typical instance was given comparatively recently when the "Ghost Train" company toured New Zealand. highly expert staff of technicians—nearly a dozen mentravelled with the company and contrived to present a superb imitation of engine and train noises, the escape of steam, the clatter of the shovel in the fire-box, starting and stopping, and the other hundred odd sounds inseparable from every railway station.

To the average theatre-goer or radio listener it would seem that highly elaborate apparatus must be required for this work, but the amazing thing is that the more everyday and simple the appliances the better the effect. Recently, according to a writer in the "Daily Sketch," a huge and mysterious parcel arrived at Broadcasting House, addressed to the Sound Effects Department, where experiments have been going on for a long time. The parcel contained apparatus for producing the sound of seagulis in flight.

Sound effects represent one of the most important forms of activity at Broadcasting House. There are seven young men in the department working under Mr. W. MacLurg. Since the days of Savoy Hill, research experts have gone into the subject deeply. High points of acoustics have been considered and famous scientists consulted. Still the investigations go on with the purpose of discovering the best methods of reproducing everyday and extraordinary sounds.

The noise and cry of seagulls, as represented by the bulky parcel which arrived at the B.B.C. the other day, was one of the first fruits of the experiments. The experts have come to certain decisions about sound effects on the air; they have decided in the first place that where it is necessary to reproduce by faking such sounds, they should be done "manually" in the studio and not by a gramophone record. A great deal of trouble has been taken to find a better method of conveying the impression of galloping horses than by the use of two coconut shells, one clapped upon the other, the old stage method in fact, but the experts agree that the coconut shells give better results than any other tricks of technique, including gramophone records.

It is true that gramophone records have been taken of galloping horses, but these, while they are realistic, do not enable the Sound Effects Department to switch off at the right moment. When the coconut shells are used, they can slow down or stop when they like, fading out into the gradual standstill point of the horses' hoofs. Though the record can be stopped at will, it is not "elastic" enough to portray in sound the phases of slowing up. All the records made merely reproduce the pit-a-pat of horses' hoofs without a beginning or an end.

It was Brian Michie who built up the Sound Effects Department at the B.B.C. When he took over the job from Denis Freeman at Savoy Hill, a good foundation had been laid, but from time to time there cropped up problems which had to be solved in rough and ready fashion. For instance, there was an occasion when the sound of an avalanche had to be reproduced. All kinds of efforts were made, including the use of gramophone records, to suggest this sound over the air, but in rehearsal it was found that none of them was effective. Then Michie had a brain wave. He sent out for a stone of potatoes and two buckets. When the moment came for the avalanche to occur he poured the potatoes from one bucket to another, and the microphone effect was perfect. This method is still used.

The sound of marching men is another problem which, during the last ten years, has absorbed the attention of the responsible people. Here, again, a perfect solution has now It involves the use of a box of gravel been discovered. upon which one man stands, shuffling his feet in the time Again, though actual records have and rhythm required. been made of thunder and storms at sea, it has been found that these effects can best be reproduced at the studio. The splashing with a specially-shaped gadget in a water-tank comes over better as a storm effect, with the help of a windcreating roller, than the actually recorded sound itself. Thunder, also, can be made to sound more realistic than the real thing on a record when two or three men from the Sound Effects Department get busy.

A number of German and American gramophone records have been made with the object of producing realism in radio plays. Some of these are highly useful, especially those recording the sounds of an aeroplane or a motor-car. But when he is faced with the task of reproducing other intimate and yet of their kind, everyday sounds, the producer of a radio play finds himself in a dilemma.

The B.B.C. still has to go a long way to attain perfection in "noises off" and more than a few radio plays have suffered through inadequate effects of this kind. It is a problem in the solution of which author and producer must put their heads together and hope for the best help from the researches which are now going ahead rapidly.