

Winners in the Making

(Continued from page 1.)

straight for a furlong or so in front of the stands. This is all part of their education, the opportunity being taken by trainers to accustom their young horses to the crowds and noises associated with the race-track on race day.

Not the least important part of a young horse's education is the treatment and attention he receives in and around his stable. The growing horse is very much in the same position as the growing child. His habits have to be studied, his diet has to be given careful attention, and, like the infant, he is susceptible to baby ailments. It is generally recognised these days that the science of hygienics plays an important part in stable management, and the thoroughbred's toilet occupies an important place in his daily routine. His box in which he spends the night is cleaned first thing in the morning, his feed manger is washed, his night rugs (should we call them his py-jamas?) are removed, and he is brushed and clad in his going-out gear in preparation for his morning visit to the track. After his morning exercises on the track he returns to the stable, where he is thoroughly groomed, an operation which usually amounts to an hour of steady manual labour. If the weather is suitable he is then turned out in a paddock for an hour. In the afternoon he is taken for walking exercises for an hour or so, after which he is groomed again, fed at about five o'clock if it is winter, or 5.30 if it is summer, and finally bedded down for the night in a cosy bed of straw about 9 to 12 inches deep.

Feeding is another important factor in the life of the thoroughbred. As the animal is not able to tell his trainer how he feels, the amount of work he gets is governed usually by the amount of food he eats. His daily menu consists of measured quantities of dun oats, chaff, and hay sweetened with molasses and salt, and in the winter, when suitable grass is not available, carrots are substituted.

As with human beings, so with thoroughbreds, dental hygiene is an all-important factor toward good health. The horse also loses his baby teeth, and his second set have to be carefully watched and the sharp edges which appear through his munching of hard corn kept filed down, lest they cause an eruption on his fleshy jaw, and thus render him a difficult subject to control with the bit. This work is done by a qualified veterinary surgeon. Just as we become run down through over-work or nervous strain, so does the horse occasionally require a spell or a stimulating tonic to build him up again. Through a close study of the varying temperaments of the members of his team, a trainer knows by instinct and by the animal's demeanour when this is required.

I have fairly covered, up to this point, the rearing and early education of the thoroughbred. Once he has been taught to show his speed under control he is given gradually increasing tasks, sometimes against his own stable companions and occasionally is tried out in competition with horses of his own age from contemporary stables. His action and the manner in which he accomplishes his work usually suggests to his connections whether he is a two-year-old prospect. Maybe he is gross

"The Folk Music of Erin"

is the title of a concert to be broadcast from 4YA on Wednesday, July 27, with introductory remarks by G. W. Johnstone.



and requires more time to develop; perhaps he has come to hand early and it is decided to race him in the early spring events. It is then that a trainer's worries really begin. He is hopeful that the care and patience he has lavished on the youngster will materialise into success. But there are many hurdles to be surmounted. Will he get away from the barrier? Will he get a good run and dodge the crowding on the turn? Will he get hemmed in on the rails with beaten horses coming back on him when he wants to get out and show his speed at the finish? These are some of the doubts and fears which cross the mind of the trainer when his patron and his patron's friends seek advice whether they should support the stable hope. He wins, and hopes immediately soar into the realm of classics, with prospects of Guineas, Derbies and Oaks coming to the stable. He loses, perhaps after having every chance in the running, and hopes have crashed like the snuffing out of a candle.

You, with your modest investment, merely write him down among your list of duffers, the owner feels he has bought a gold brick or bred a waster, but the calculating mind of the trainer assesses his loss by the months of patient and careful work which had to be given to the failure, but which might have been more profitably spent on something else. And so racing goes on. Without this element of chance the sport would quickly founder, but the trainer who has to experience that empty feeling when the stable hope fails to come on might have some cause for believing that his profession is no primrose path.

An Up-to-Date Station

STATION WGN, Chicago, the Western key station of the Columbia chain, operates on a power of 25 k.w. The transmitter is situated 40 miles from the studio in the city, and has an exclusive frequency. Although numerous advertising and commercial programmes are broadcast, all are strictly censored, and are never accepted unless the advertised article is of proved worth and the accompanying programme of artistic merit. To further satisfy the demands of listeners, the station maintains a full symphony orchestra, a string trio, and a composer of note.

Church Radio Installation

For Relaying Services

SOME time ago the minister and office-bearers of St. Andrew's Church, Hastings, resolved to experiment in the matter of relaying the evening service to the newly-erected St. John's Hall at Mahora.

The experiment proving successful, it was decided to instal the apparatus in permanent form and relay the service every Sunday evening. A slight delay occurred owing to the fact that such a thing had never been done, and the Telegraph Department had no regulations dealing directly with such a case. Every assistance was given by the officers of the department, and after the Postmaster-General had been consulted, a satisfactory arrangement was agreed upon.

The installation is now working most satisfactorily, and those who worship in St. John's Hall every Sunday evening are very appreciative of what has been done on their behalf. The installation was carried out by Sutcliffe's, Ltd., through their radio engineer, Mr. Barcham.

The microphone in front of the pulpit in St. Andrew's is of the Western Electric double button type. It feeds into a single stage pre-amplifier worked entirely from dry cells. The pre-amplifier feeds into the line through an impedance matching transformer and the sound is carried along about a mile and a half of cable to St. John's Hall. There the line is coupled to a Loftin-White amplifier through a further line impedance matching transformer. This amplifier drives a concert-type a.c. dynamic speaker. The volume is controlled by a switch operated from the back of the hall, and the whole apparatus is brought into use by a switch at St. Andrew's Church.

The whole service goes through in a natural way, and there is nothing to detract from the reverent atmosphere of worship. Thus the congregation at St. John's Hall joins in the singing of the hymns, being led by the pipe organ and choir of St. Andrew's. There is no trouble with static and no fading away of the sound.

The minister and office-bearers of St. Andrew's Church are to be congratulated on discovering and carrying out a

new method of church extension. In this way a minister is enabled to conduct two or more services simultaneously, thus solving one of the church's problems in connection with suburban areas. As this method becomes known it will no doubt be applied in many other parts of the country.

Spectacular Radio Telephony Experiment

Between Aeroplane and Train

AN experiment to test the possibility of wireless telephonic communication between passengers in trains and aircraft was carried out successfully in England recently. Messages were sent and received between the northward-bound "Flying Scotsman" and the Imperial Airways liner Heracles, which was flying to Glasgow.

At the rear of the Flying Scotsman was attached a standard East Coast brake-van which had been equipped as a wireless receiving and transmitting station with the call signal G5FL. For the experiment a Marconi set, of the standard type used in aircraft, working on a wavelength of 820 metres, was installed.

The Heracles took off from Croydon at 11 a.m.—an hour after the "Flying Scotsman" left King's Cross—and overtook the train, which was identifiable by its name painted on its roof, shortly before reaching Grantham.

Wireless communication was promptly established, and with the aid of both a loudspeaker and headphones those in the train were able to call and converse with acquaintances in the aircraft while travelling at full speed. In spite of some interference of aircraft and locomotive noises, reception was surprisingly clear.

After flying with the train for some 40 miles, the Heracles left it at Retford. Communication was, however, maintained for as long as possible, until it grew too faint with increasing distance.

Owing to the exigencies of time, the train had been equipped for the test with a short inside aerial, which limited the distance over which transmission could be effected.

Even so, the results obtained were better than had been anticipated. The train proved capable of transmitting messages up to a distance of nearly five miles, and for some time after that it was considered that further communication would be impossible. Reception from the aircraft continued longer, and was still good when the Heracles switched over to its normal wavelength of 900 metres.

With more powerful apparatus and a suitable aerial it is believed that wireless telephonic communication between trains and aircraft could be satisfactorily carried on at distances up to 50 miles.

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and
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in
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