

SPANNER TELLS YOU ALL ABOUT

MECCANO'S NEW LOOK

Re-Styled Books Of Models: Extra Parts: Revised Outfits

MECCANO in 1962 is better than at any time in its history, for this year has brought the introduction of new Parts, a revised range of Outfits and finally—and perhaps most important of all—a completely new series of Books of Models in an entirely new and revolutionary style. These innovations will add tremendously to the fun and pleasure obtained from model-

building, in addition to increasing the scope for models and enhancing their realism.

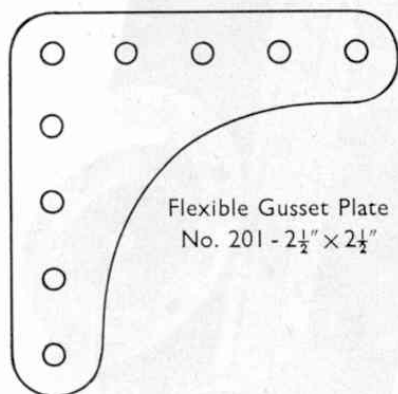
Some of the new Parts that are being introduced are shown in the illustration below, but before I go into details about them I want to tell you about the splendid new Model Books that have been prepared. These Books have been planned on a completely new basis and are the result of

over two years' work by model-builders, technical artists, and the writer of this article.

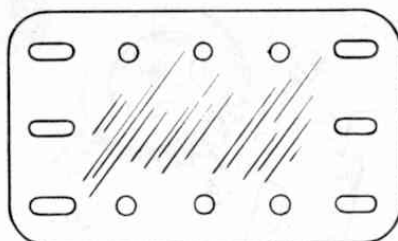
They have been prepared in a style that is completely different from that of any previous Meccano Instructions Books, and their main feature lies in the absence of written instructions. The construction of each model is shown entirely by pictures consisting of photographs and cleverly-prepared perspective and exploded drawings, with the part numbers on or adjacent to the actual Parts used.

Examples of the new presentation are given on the two following pages and you will see from these that the constructional details of the models are clearly and fully

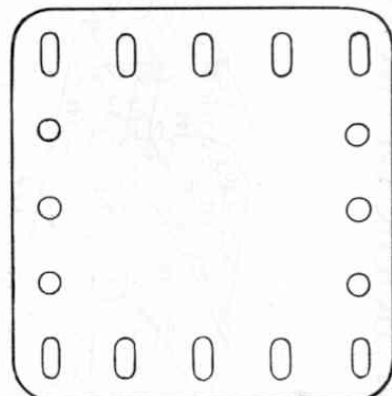
(Continued on page 114)



Flexible Gusset Plate
No. 201 - $2\frac{1}{2}$ " \times $2\frac{1}{2}$ "



Plastic Plate, Transparent
No. 193 - $2\frac{1}{2}$ " \times $1\frac{1}{2}$ " No. 193c - $4\frac{1}{2}$ " \times $2\frac{1}{2}$ "
No. 193a - $2\frac{1}{2}$ " \times $2\frac{1}{2}$ " No. 193d - $5\frac{1}{2}$ " \times $1\frac{1}{2}$ "
No. 193b - $3\frac{1}{2}$ " \times $2\frac{1}{2}$ " No. 193e - $5\frac{1}{2}$ " \times $2\frac{1}{2}$ "

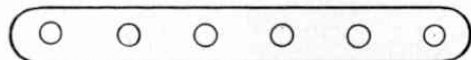


Plastic Plate, Red
No. 194 - $2\frac{1}{2}$ " \times $1\frac{1}{2}$ " No. 194c - $4\frac{1}{2}$ " \times $2\frac{1}{2}$ "
No. 194a - $2\frac{1}{2}$ " \times $2\frac{1}{2}$ " No. 194d - $5\frac{1}{2}$ " \times $1\frac{1}{2}$ "
No. 194b - $3\frac{1}{2}$ " \times $2\frac{1}{2}$ " No. 194e - $5\frac{1}{2}$ " \times $2\frac{1}{2}$ "

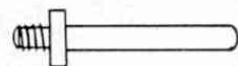
NEW MECCANO PARTS



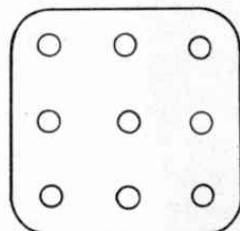
No. 14a Axle Rod - $5\frac{1}{2}$ " long



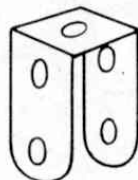
Narrow Strip
No. 235 - $2\frac{1}{2}$ " \times $1\frac{1}{2}$ " No. 235b - $3\frac{1}{2}$ " \times $1\frac{1}{2}$ "
No. 235a - 3 " \times $1\frac{1}{2}$ " No. 235d - $4\frac{1}{2}$ " \times $1\frac{1}{2}$ "
No. 235f - $5\frac{1}{2}$ " \times $1\frac{1}{2}$ "



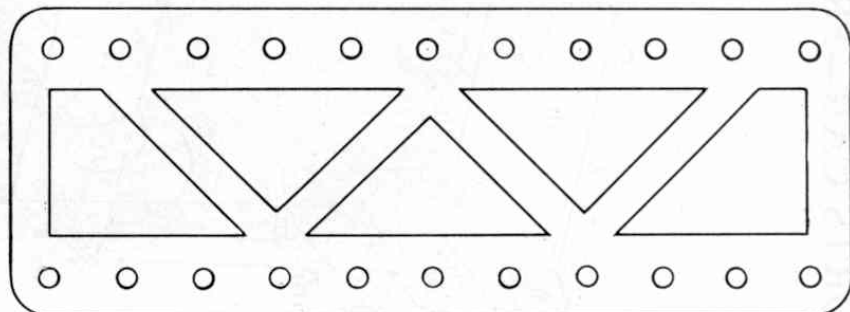
No. 115a Threaded Pin, Long



No. 74 Flat Plate - $1\frac{1}{2}$ " \times $1\frac{1}{2}$ "

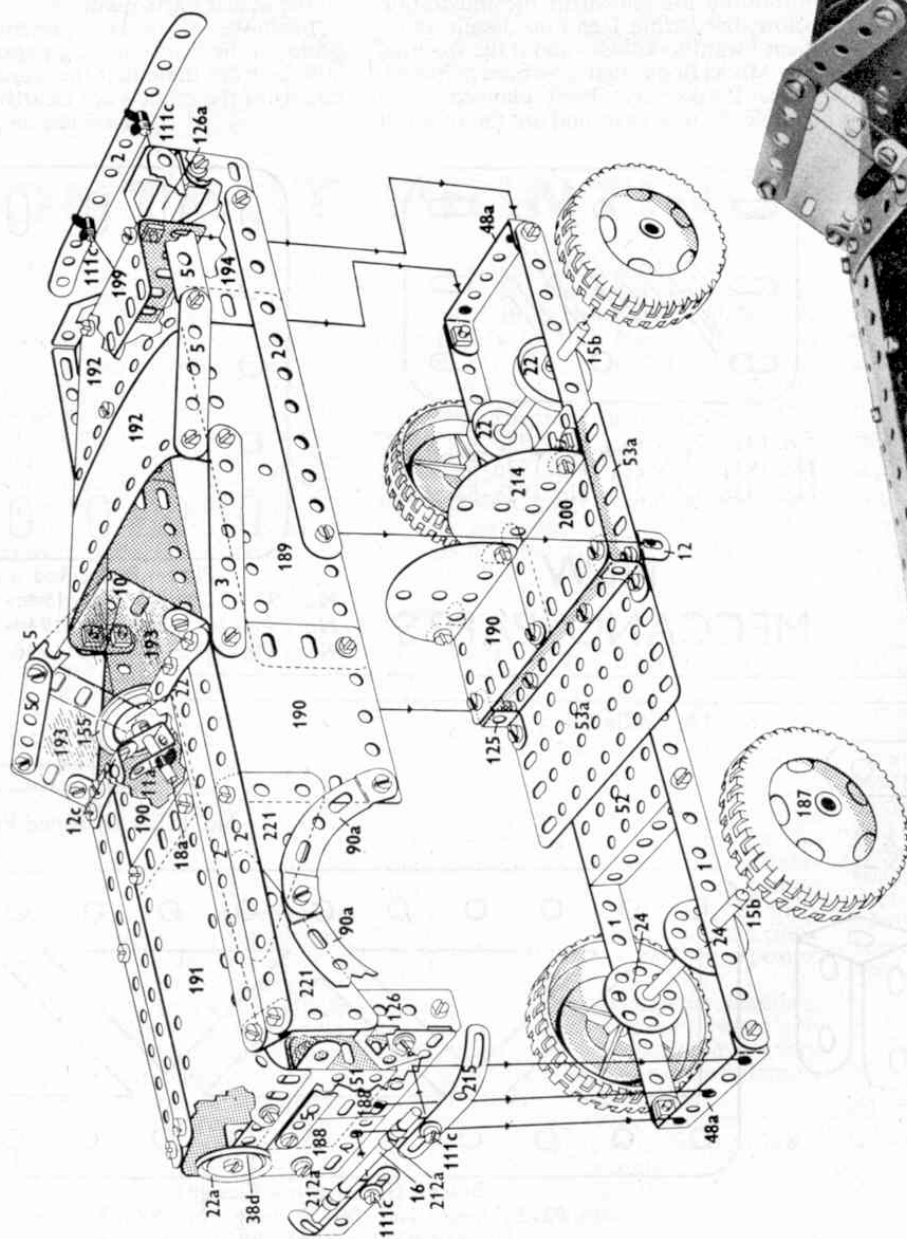


No. 11a
Double Bracket - 1 " \times $\frac{1}{2}$ "

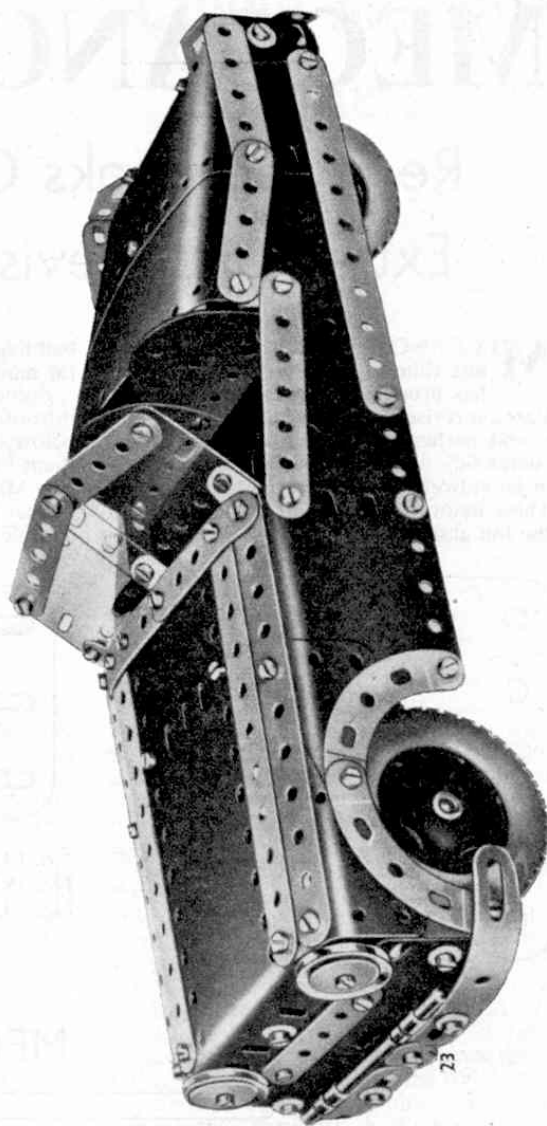


Braced Girder (New Design)
No. 97 - $3\frac{1}{2}$ " long No. 100 - $5\frac{1}{2}$ " long No. 99b - $7\frac{1}{2}$ " long
No. 99a - $9\frac{1}{2}$ " long No. 99 - $12\frac{1}{2}$ " long

SPORTS CAR—FROM THE NEW BOOK OF MODELS FOR OUTFITS 4, 5 & 6



2	-	1	1	-	52
7	-	3	2	-	53a
2	-	5	4	-	90a
9	-	10	5	-	111c
4	-	11a	2	-	125
1	-	12c	2	-	126
9	-	15b	2	-	126a
4	-	16	1	-	155
4	-	18a	4	-	187
1	-	22	2	-	188
1	-	22a	2	-	189
3	-	23	4	-	190
1	-	24	1	-	191
2	-	35	2	-	192
2	-	37a	2	-	193
3	-	37b	2	-	194
92	-	38	1	-	199
81	-	38d	1	-	200
12	-	48a	2	-	212a
2	-	51	2	-	214
2	-	-	2	-	215
1	-	-	4	-	221



illustrated—"blueprints", you could almost call them. Once the knack of reading the drawings is acquired, and this will not take very long, the assembly of the models should be quite easy to follow.

There is one important point to note here. While the sample illustrations which accompany this article are illustrated only in black, in the actual Books of Models all the Part Numbers used are printed in red as an aid to clarification. Now look at the illustrations again and you will see that each is accompanied by a panel of figures. The bolder figures printed just in front of the panels indicate the number of the Outfit the model is built from and the number of the model in the actual Book of Models. For instance in the case of the Sports Car the figures 4.15 mean that this model is the fifteenth No. 4 Model in the Book covering the 4, 5 and 6 Outfits, and in the case of the Power Press the figures 5.1 denote that this is the first No. 5 Model outlined in the same Book. The figures actually within the panels indicate the number of Parts needed for each Model, the first figure given being the actual number of Parts required and the second the Part Number.

The new Books of Models are very attractively printed on high-quality art paper. All the models they contain have been specially designed in our Model-Building Department and most of them incorporate some of the newly-introduced Meccano Parts.

The new Books of Models will cover the following combinations of Outfits: One Book for Outfits 0 and 1; one for Outfits 2 and 3; one for Outfits 4, 5 and 6 and one for Outfits 7 and 8. For Outfit No. 9, there will be a series of ten 6-page Special Model Leaflets numbered 9.1 to 9.10 produced to the same scheme as the Books themselves, and each of these illustrates one large model designed for construction from that Outfit.

So much work, thought and artistic and printing skill has been put into the production of these Books to make them the best Meccano have ever produced that I urge every Model-Builder to go along to his Dealer and ask for particulars.

* * * *

Now for the new Parts that are to appear in the Meccano range. These Parts are, of course, contained in greater or lesser degree in the new 1962 Outfits and all of them should soon be available for separate sale. Some of them are illustrated on the first page of this article, together with the Part Numbers allocated to them. In addition, there are one or two others, illustrations of which were not available at the time these notes were written.

Probably the most exciting development these new additions bring to the Meccano system is the introduction, for the first time, of plastic Plates. These will be available in opaque red and also in transparent plastic. Both the Red and the Transparent Plastic Plates are extremely flexible and can be curved into complete



tubes without any damage whatever. Immediately they are released they spring back to the flat as a result of this quality. The Red Plastic Plates are most useful for forming curved portions of models, and as they are the same colour as the existing metal Flexible Plates they can be used with, and are practically indistinguishable from, the latter, when both are built into a model. It should be made clear, however, that it is not intended that the Plastic Plates should be used for filling in large flat surfaces of structures or that they replace the existing metal Flexible Plates. The metal Flexible Plates should be used for general filling-in purposes, and the Plastic Plates reserved for shaping and filling in any curved surfaces that may have to be reproduced.

The Red Plastic Plates will be obtainable in the following sizes: No. 194, $2\frac{1}{2}'' \times 1\frac{1}{2}''$; No. 194a, $2\frac{1}{2}'' \times 2\frac{1}{2}''$; No. 194b, $3\frac{1}{2}'' \times 2\frac{1}{2}''$; No. 194c, $4\frac{1}{2}'' \times 2\frac{1}{2}''$; No. 194d, $5\frac{1}{2}'' \times 1\frac{1}{2}''$; No. 194e, $5\frac{1}{2}'' \times 2\frac{1}{2}''$.

The primary use for the Transparent Plastic Plates, of course, is for representing windows, which are required in many kinds of models, such as cabs of cranes, locomotives, bridges of ships, etc. Now, for the first time, you will be able to add this special touch of realism to your models. The Transparent Plastic Plates will be obtainable in the following sizes: No. 193, $2\frac{1}{2}'' \times 1\frac{1}{2}''$; No. 193a, $2\frac{1}{2}'' \times 2\frac{1}{2}''$; No. 193b, $3\frac{1}{2}'' \times 2\frac{1}{2}''$; No. 193c, $4\frac{1}{2}'' \times 2\frac{1}{2}''$; No. 193d, $5\frac{1}{2}'' \times 1\frac{1}{2}''$; No. 193e, $5\frac{1}{2}'' \times 2\frac{1}{2}''$.

Two other new Parts that will be much welcomed by more advanced model-builders are a large diameter tyred Road Wheel (Part No. 187b) and a modern style Steering Wheel (Part No. 185a). Both will form very useful accessories for builders of large-scale model vehicles, and their use will add considerably to the general effect. The new Road Wheel is generally similar in design to the existing Road Wheel No. 187, but whereas the latter has a diameter of $2\frac{1}{2}''$, the new part is $4\frac{1}{2}''$ in diameter. It is made in plastic, with a

finely moulded representation of a heavy tread tyre, and is finished in blue and grey. The new Steering Wheel has a diameter of $2\frac{1}{2}''$ and has three arms as against the four arms of the existing smaller Steering Wheel No. 185.

* * * *

Still another innovation is the introduction of Narrow Perforated Strips $\frac{1}{8}''$ wide. Apart from the fact that they are only about half the width of the ordinary Strips, they are similar to the latter in other respects. They are obtainable in a range of different lengths and will be found very suitable for use as bracing in girder work, jibs of cranes etc., as their narrow width gives better proportions and a much lighter and neater effect than when the standard width Strips are used for these purposes. There are, of course, many other applications for the Narrow Strips, such as in forming the window and wind-screen framing of motor vehicles, and in the building up of radiator grilles. In addition, there are many instances in general model-building, and in the assembly of mechanisms, where the availability of these Narrow Strips will prove of great value.

Among the other new additions to the Meccano range is a new style of flexible metal plate bearing the name Flexible Gusset Plate, and carrying the Part No. 201. This is illustrated on page 111. It is made of similar metal to that used for the Triangular Flexible Plates Nos. 221 to 226, and is enamelled Red. The Flexible Gusset Plate is designed for use in shaping the curved edges of structures, for example, the semi-circular wheel arches of some motor-cars. Two of the Parts used together will give a complete semi-circular edge. The Parts can also be used for plating around tubular structures, such as the decking around a ship's funnel and for forming the radiused corners often required in assembling the framework of models.

The purposes and uses of other new parts such as the $5\frac{1}{2}''$ Axle Rod, listed in this month's illustrations, will be obvious, and their appearance in the range will do much to increase the facilities available to the model-builder. The new Strip Plate, $7\frac{1}{2}'' \times 2\frac{1}{2}''$, No. 195, is an addition to the two existing Strip Plates Nos. 196 and 197, and is made of similar metal. It is finished in Red.

The Long Threaded Pin (Part No. 115a) is a longer version of the Threaded Pin (No. 115) and has been asked for by innumerable correspondents. It can be used to form long stub axles, and has numerous uses in mechanism building, while it will also serve as a handle for a handwheel when fixed to a $3''$ Pulley or other suitable part.

Many correspondents have also asked for a smaller version of Part No. 72, $2\frac{1}{2}'' \times 2\frac{1}{2}''$ Flat Plate, one of the most useful of the various Meccano Flat Plates. There are, however, cases where the $2\frac{1}{2}'' \times 2\frac{1}{2}''$ Flat Plate is too large to use conveniently, and in order to fulfil these needs we have now (Cont. on page 132)

Police Dogs on Patrol—

(Continued from page 93)

gardens. Kennels and dog runs are provided in the gardens, and in this way each unit can work independently, one handler looking after both dogs when his neighbour is on duty elsewhere.

The duty of the divisional dog handlers is to cover the whole area of the division so far as police dog work is concerned, moving from place to place as the need arises. Motor vans fitted with two dog cages at the rear, and equipped with radio, are used to get the team to the scene of operations. Most of the work done by police dogs is performed in the evening and at night, as the best use can be made of them at that time of day. But they are on call for 24 hours, and have to turn out any time, regardless of whatever duties they have already performed that day.

In addition to the divisional dog handlers, some police forces have other dog handlers performing regular foot patrols with their dogs instead of being called out simply for special jobs. This patrolling the beat with Alsations has proved most successful in the thickly-populated areas of such cities as Liverpool and Manchester, where the presence of a policeman on the beat, with his dog, prevents rowdiness and unruly behaviour.

You may ask what becomes of these canine guardians of the law when their police force days are over. They are not destroyed, but are found good homes in their retirement.

It is now generally considered that trained police dogs are one of the greatest deterrents to criminal activities. In addition to their very thorough training they undergo refresher courses, at fairly frequent intervals, so that they do not forget their lessons.

The Mystery of the "Waratah"—

(Continued from page 103)

reason, she had been travelling so slowly, why had the *Clan MacIntyre* not sighted her as she came up behind on the same course?

In the weeks that followed there were reports of bodies in the sea but none of these reports was proved. The crew of the ship *Tottenham* thought they saw bodies on August 11, but what they in fact saw were sunfish or skate. Week after week the seas were scoured. Three warships were among the searchers, and the Australian Government paid the expenses of the *Severn* which sailed 2,700 miles in four weeks, but found nothing. The most thorough search, however, was carried out by the *Sabine*, which had been specially chartered by the Blue Anchor Line. For 88 days, from September 11, she cruised 14,000 miles. Following the theory that, since no wreckage had been discovered, the *Waratah* may have become a drifting derelict, the *Sabine* followed the ocean currents to the lonely island of St. Paul, but although she discovered a number of

wrecks she failed to find a clue to the fate of the *Waratah*.

Even the Court of Inquiry which considered all the available evidence could not offer a solution to the mystery. Its eventual finding was that "the ship was lost in a gale of exceptional violence, the first great storm she had encountered, and the vessel capsized."

What really happened will probably never be known, but it is almost certain that the *Waratah* went down in the hurricane before there was time to launch the lifeboats or make distress signals. But even if this is the answer, why was no wreckage, such as deck chairs, lifebelts, or the hundred and one other pieces of equipment which would float, seen by the scores of ships which travelled that busy sea route off the eastern coast of South Africa?

Hornby-Dublo (Layout Man)—

(Continued from page 123)

so that trains are of easily manageable length, a point that is important when they have to be stowed away into sidings.

Oil for the diesels

Turning now to our third picture, taken on the layout of S. F. Page, of St. Albans, we have an interesting instance, in miniature, of one form of motive power helping another. The Hornby-Dublo 0-6-0 Tank Locomotive shown is bringing a train of Esso Fuel Oil Tank Wagons into a motive power depot on the layout, the cargo in the tanks being intended for the Diesel Locomotives that share in the working of the layout.

It might be argued that a Diesel Shunting Locomotive would be more appropriate for a train of this kind. There is something to be said for this point of view, but in the picture I find the homely outlines of the 0-6-0 Tank very satisfying.

The scene is one that could be observed in real life at the many depots where nowadays diesel and steam locomotives live more or less side-by-side.

Meccano's New Look—

(Continued from page 114)

introduced a $1\frac{1}{2} \times 1\frac{1}{2}$ " Flat Plate (Part No. 74). I am sure that this will prove a most useful component and a very welcome addition to the range.

In addition to the inclusion of these entirely new Parts in the system, modifications have been made to certain existing Meccano parts. The most important of these is the Braced Girder. In future, the design of this Part will be as shown in our illustration on page 111, and it will be available in the five different lengths listed under the drawing.

A small alteration has been made in regard to Part No. 22 1" Pulley, with boss and screw. In future, this Pulley will be fitted with a grub screw, instead of a set-screw as in the past.

Easy Model-Building—

(Continued from page 115)

ornament on the front of the bonnet consists of a Collar mounted on a $\frac{1}{2}$ " Bolt. The radio aerial is a 4" Rod held in a Rod and Strip Connector bolted to the side of the car. A Magic Motor if available can be fitted to the model in the position shown in Fig. 2.

Parts required to build the Meccano Motor Car: 2 of No. 1; 2 of No. 1a; 4 of No. 2; 4 of No. 3; 1 of No. 4; 2 of No. 6; 4 of No. 10; 26 of No. 12; 1 of No. 12c; 1 of No. 15; 1 of No. 15b; 1 of No. 16; 1 of No. 18b; 2 of No. 22a; 1 of No. 24a; 94 of No. 37a; 94 of No. 37b; 4 of No. 38; 2 of No. 38d; 1 of No. 48; 1 of No. 48b; 1 of No. 51; 3 of No. 59; 1 of No. 126; 2 of No. 136; 4 of No. 187; 2 of No. 189; 2 of No. 190; 2 of No. 191; 2 of No. 192; 2 of No. 193d; 2 of No. 194e; 2 of No. 199; 1 of No. 212; 2 of No. 214; 4 of No. 215; 2 of No. 221; 2 of No. 235.

The G.P.O. "Pirate" Squad—

(Continued from page 127)

Perhaps the receivers are to the right or left—the detector van equipment still picks them out quickly. For example, when the van passes in front of a house on the same side of the street which contains a working radio or TV receiver, the indications from the fore and aft loop aerials are equal, and those from the off-side loop aerial are weaker than that from the other two.

The strength of the induction magnetic field varies inversely as the cube of the distance, and this fact enables receivers, even in adjacent premises, to be separately detected. The brick walls of houses have no effect on the magnetic field at the relatively low frequency (20.25 kc/s) used.

A portable detector "gun" can be carried. This is used to trace receivers in flats and buildings where more than one set is operating at the same time, or for the engineers to walk where the van cannot be driven.

This same technique is applied to detect outside radio or TV interference. Over a period of nights, my own radio receiver had suffered from intense crackling and was corrected by the G.P.O. Pirate Detector Squad. Suppressors were fitted to the offending source of interference, which proved to be a washing machine.

In all kinds of weather the squad makes its sweeps or "combs". The total number of licences current in England at April 30, 1961 was 9,147,333 for television, and 6,473,275 for radio.

The average number of prosecutions against radio and TV pirates is 7,500 for the entire country. It says much for the vigilance of the squad that in one northern city, with a population of 450,000, there were only 73 prosecutions last year. One person in every 50 attempts to evade licences.

Hear that crackle? See that flash? Better ask father if he has a licence. You never know!