



Above and left, some more examples of non-standard meshing, these suggested by Mr. Bert Halliday of London. The black dots, of course, represent the holes in which the supporting axles would be mounted; the figures (e.g. 95t, 25t, etc.) indicate the Meccano gears, identified by their number of teeth, carried on those axles. The 13t gear indicated in the top left diagram is the final drive Pinion from a No. 1 Clockwork Motor. With reference to the Corner Gusset (left), the vacant holes allow the Gusset to be bolted to any standard Plate, Girder, etc. without use of slotted holes.

bolted to the round holes of 1½" Flat Girders, and these were bolted to the flanges of a 2½" x 1½" Flanged Plate and extended upwards for clearance purposes to the limits of the slotted holes. The arrangement revealed the startling possibilities of the innocent-looking Corner Gusset as the framework of a gearbox embracing several unorthodox ratios, on the original 4-axle configuration marked A - B - E - F in my diagram (reproduced here). Later, the holes marked C and D revealed other possible ratios, and you are still left with vacant, normally-spaced holes for fix the Corner Gussets to Plates or Girders, as required.

"To date," continued Mr. Halliday "I have not progressed further with my findings, but I would con-

sider that, with intermediate or extension Corner Gussets, half-shafts could be used easily, and with extended axles and various take-offs from these, the possibility the arrangement offers to Meccano 'Crane Men' as a pretty compact gearbox is - virtually limitless. And, with most of the gear trains having a part fifth and/or third ratio characteristic, they must finish-up as a 'whole' ratio somewhere along the line - all without having to clamp cranks, etc. over slotted holes."

In addition to his Corner Gusset idea, Mr. Halliday also provided some suggested spacings using straightforward Plates or Strips as axle supports and he further suggested some very interesting spacing, using the holes in 2½" Triangular Plates.

All his ideas are reproduced here. Before leaving the subject, however, I would like to apologise for an error which occurred in the first spacing diagram on page 44 of the last issue. In the lower suggestion in this diagram we indicated that two 57-teeth Gear Wheels would mesh when their supporting axles were separated by a distance of three clear holes. In fact, two clear holes should separate them. Sorry for the error.

**CABLE CAR RAILWAY**

On a different subject, Meccano Modellers are often accused of hiding their lights under bushels and this can certainly be true. However, there can be mitigating circumstances, as Mr. A.L. Ford of Hutton, Brentwood, Essex explained in a letter to us