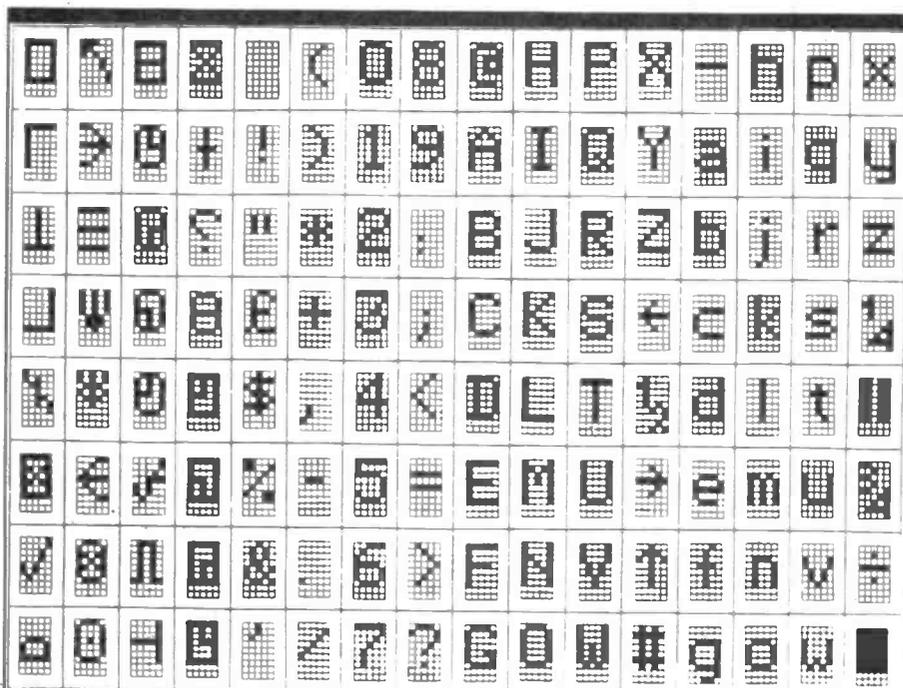


first character has been clocked out it proceeds to the next character by advancing the matrix address to select the next character and repeating the process. When

character 16 row 1 has been scanned the process is repeated four times to make the top bar of the example 'G' four TV lines thick.

Now we require the second row



of the 'G': 1, 0, 0, 0, 0. It requires the 74S262AN to present row 2 at its output data lines. Row code address on pins 4, 5, 6, 7, is incremented. The row address comes from another 74LS393 counter which is clocked by line rate pulses derived from mixed blanking via another window clipper. The QA and QB are not used so the code advances every four lines. Row 2 of all 16 characters is now clocked out followed by row 3 etc. until row 9 is complete. When row 9 is complete Pin 6 of the row clock is coupled into Q3 emitter where it switches off the clock pulses to the row counter. Q4 emitter is also pulled high which in turn switches off the 74151 so no further data is generated. Fig 5 shows the block diagram of the character generator and sequence of events.

The first thing that happens is our first monostable detects frame sync and triggers our second monostable which gives frame delay so as to position our text somewhere down the picture. When this monostable has finished its unstable