1 2 with line numbers at the left, activated by troff's $\mathbf{. n m}$ request. The complexity han3 dling tables in this case is that the $t b l$ preprocessor uses diversions when creating 4 tables. When designed, tbl's behavior was apparently not analyzed if line number5 ing was in effect. By default, text output into diversions will have line number pre6 fixes, leading to multiple line number prefixes being appended at each stage of diver7 sion processing. The tables produced in this case were effectively unreadable.
8 The main change to make numbering work properly with tables was to turn off 9 numbering in diverted text and restoring it when only the diversions were reassem-
10 bled at the topmost level to produce the printed page. The challenge doing this is to 11 design a scheme that can handle the many levels of diversions in tables. Simple
12 tables have only a single level. Drawing boxes around table entries involves another
13 level of diversion. Finally, text blocks (table entries enclosed with T\{ ... T\}) involve
14 yet another level of diversion. Assembling all these diversion levels into a single
15 line of a table requires quite subtle logic so that all cases may be treated properly.
16 The result -- simple looking -- hides some laborious processing of text.
17 The first test case is a simple table, each line of which is a simple entry.

| Simple table |  |  |
| :---: | :---: | :---: |
| Item | Value | Value |
| First | 10 | 0.1 |
| Second | 5.2 | 10 |

18 Next comes the same table with all 20 Now double boxed.
19 items boxed.

| Simple table |  |  |
| :---: | :---: | :---: |
| Item | Value | Value |
| First | 10 | 0.1 |
| Second | 5.2 | 10 |


| Simple table |  |  |
| :---: | :---: | :---: |
| Item | Value | Value |
| First | 10 | 0.1 |
| Second | 5.2 | 10 |

21 A table with a .T\& in it to change formating.
Changed format table

| Item | Value | Value |
| :---: | :---: | :---: |
| First | 10 | 0.1 |
| Second | 5.2 | 10 |

This is a text line.
22 A more complex table. The complexity is due to the text boxes on the third infor23 mation line. The numeric data is printed in one line, then the block of texts on the left
24 and right are printed in two further lines. Consequently, three output stages combine to 25 produce the resulting table. When line numbers are added to the table, they must be

26 handled properly so that the text blocks all start by having the same output line number,
27 though they may be different lengths and assembled in arbitrary order.

| Complex table |  |  |  |  |
| :--- | :---: | :---: | :--- | :---: |
| Item | Value | Value | Text |  |
| First | 10 | 0.1 | X |  |
| Second | 5.2 | 10 | X |  |
| This is a block of <br> text in a table | 1 | 2 | Another text <br> block, that will <br> be deliberately <br> longer |  |

28 The final table test will be one with a header. This requires help from the -me macro 29 package to put the header into a keep that will be included with the header of successive 30 pages of the table's text. A suitably modified .TH macro is needed to handle possible line 31 numbering properly.

| Headed, multi-page table |  |  |  |
| :---: | :---: | :---: | :---: |
| Item | Value | Value | Text |
| First | 10 | 0.1 | 1 |
| Next | 5.2 | 10 | 2 |
| Next | 5.2 | 10 | 3 |
| Next | 5.2 | 10 | 4 |
| Next | 5.2 | 10 | 5 |
| Next | 5.2 | 10 | 6 |
| Next | 5.2 | 10 | 7 |
| Next | 5.2 | 10 | 8 |
| Next | 5.2 | 10 | 9 |
| Next | 5.2 | 10 | 10 |
| Next | 5.2 | 10 | 11 |
| Next | 5.2 | 10 | 12 |
| Next | 5.2 | 10 | 13 |
| Next | 5.2 | 10 | 14 |
| Next | 5.2 | 10 | 15 |
| Next | 5.2 | 10 | 16 |
| Next | 5.2 | 10 | 17 |
| Next | 5.2 | 10 | 18 |
| Next | 5.2 | 10 | 19 |
| Next | 5.2 | 10 | 20 |
| Next | 5.2 | 10 | 21 |
| Next | 5.2 | 10 | 22 |
| Next | 5.2 | 10 | 23 |
| Next | 5.2 | 10 | 24 |
| Next | 5.2 | 10 | 25 |
| Next | 5.2 | 10 | 26 |
| Next | 5.2 | 10 | 27 |
| Next | 5.2 | 10 | 28 |
| Next | 5.2 | 10 | 29 |
| Next | 5.2 | 10 | 30 |
| Next | 5.2 | 10 | 31 |
| Next | 5.2 | 10 | 32 |
| Next | 5.2 | 10 | 33 |
| Next | 5.2 | 10 | 34 |
| Next | 5.2 | 10 | 35 |
|  |  |  |  |
|  |  |  |  |
| Ne |  |  |  |


| Headed, multi-page table |  |  |  |
| :--- | :---: | :---: | :---: |
| Item | Value | Value | Text |
| Next | 5.2 | 10 | 36 |
| Next | 5.2 | 10 | 37 |
| Next | 5.2 | 10 | 38 |
| Next | 5.2 | 10 | 39 |
| Next | 5.2 | 10 | 40 |
| Next | 5.2 | 10 | 41 |
| Next | 5.2 | 10 | 42 |
| Next | 5.2 | 10 | 43 |
| Next | 5.2 | 10 | 44 |
| Next | 5.2 | 10 | 45 |
| Next | 5.2 | 10 | 46 |
| Next | 5.2 | 10 | 47 |
| Next | 5.2 | 10 | 48 |
| Next | 5.2 | 10 | 49 |
| Next | 5.2 | 10 | 50 |
| Next | 5.2 | 10 | 51 |
| Next | 5.2 | 10 | 52 |
| Next | 5.2 | 10 | 53 |
| Next | 5.2 | 10 | 54 |
| Next | 5.2 | 10 | 55 |
| Next | 5.2 | 10 | 56 |
| Next | 5.2 | 10 | 57 |
| Next | 5.2 | 10 | 58 |
| Next | 5.2 | 10 | 59 |
| Next | 5.2 | 10 | 60 |
| Next | 5.2 | 10 | 61 |
| Next | 5.2 | 10 | 62 |
| Next | 5.2 | 10 | 63 |
| Next | 5.2 | 10 | 64 |
| Next | 5.2 | 10 | 65 |
| Next | 5.2 | 10 | 66 |
| Next | 5.2 | 10 | 67 |
| Next | 5.2 | 10 | 68 |
| Next | 5.2 | 10 | 69 |
| Next | 5.2 | 10 | 70 |
| Next | 5.2 | 10 | 71 |
| Next | 5.2 | 10 | 72 |
| Next | 5.2 | 10 | 73 |
| Next | 5.2 | 10 | 74 |
| Next | 5.2 | 10 | 75 |
|  |  |  |  |
|  |  |  |  |

## Centered text

in a
block
This is a quoted block in the page. This is a quoted block in the page. This is a quoted block in the page. This is a quoted block in the page.

32 Another centered text block
Item one in a list block in the page.
Item two in a list block in the page.
Item three in a list block in the page.
Item four in a list block in the page.

