

This is a list of all corrections made to *Computers & Typesetting* between 15 March 1992 and the publication of the final printed versions of those books. Corrections made to the softcover version of *The T<sub>E</sub>Xbook* are the same as corrections to Volume A. Corrections to the softcover version of *The METAFONTbook* are the same as corrections to Volume C. Changes to Volume B refer to the fourth printing (1991), which differs markedly from earlier printings because it includes all the revisions for T<sub>E</sub>X3.0. Changes to Volume D refer to the third printing (1991), which differs markedly from earlier printings because it includes all the revisions for METAFONT2.0. Changes to the mini-indexes and master indexes of Volumes B and D are not shown here unless they are not obviously derivable from what has been shown.

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Page A23, line 14 (9/1/92)

a command and you type ‘`tex`’ or ‘`run tex`’ or something like that.)

---

Page A53, line 23 (7/7/92)

*scientiarum imperialis petropolitanae* became *Akademiã Nauk SSSR, Doklady*.

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Page A146, line 2 from the bottom (2/25/93)

`\bigl| |x|-|y| \bigr|`  $||x| - |y||$

---

Page A149, lines 3–5 (2/25/93)

example, we used `\bigl` and `\bigr` to produce  $||x| - |y||$  in one of the previous illustrations; `\left` and `\right` don’t make things any bigger than necessary, so ‘`\left|\left|x\right|-\left|y\right|\right|`’ yields only ‘ $||x| - |y||$ ’.

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Page A158, line 18 from the bottom (2/25/93)

are four possibilities for each of these fields. A field can be

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Page A282, line 9 from the bottom (7/8/92)

category 4) are intercepted by the alignment process, en route to T<sub>E</sub>X’s stomach, so

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Page A293, new paragraph after line 15 (4/9/92)

■ `\unhbox`(8-bit number), `\unhcopy`(8-bit number). The specified box register must be void. Nothing happens.

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Page A309, line 23 (7/7/92)

`petropolitana\ae\}` became `{\sl Akademi\t\i a Nauk SSSR, Doklady}`.

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Page A320, line 11 (1/26/93)

**17.12.** `\bigl(x+f(x)\bigr) \big/ \bigl(x-f(x)\bigr)`. Notice especially the

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Page A349, second line from the bottom (7/8/92)

expand to a  $\langle$ number $\rangle$  en route to T<sub>E</sub>X's "stomach"; `\multiply` wouldn't work, because

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Page A358, bottom line (2/3/93)

it is easy to define `\ldots` and `\cdots` macros that give the proper spacing in most

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Page A370, lines 28 and 29 (9/1/92)

example, if T<sub>E</sub>X is implemented for a purely Cyrillic keyboard, the letter 'π' should be assigned to code '160' and 'τ' to code '164', so that 'πτ' still means 'pt'; or else control

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Page A377, lines 17–24 (5/4/92)

```

\def\sanswitch{\let\n@xt\endsanity \ifx\next\endsanity
  \else\ifcat\noexpand\next\stoken\aftergroup\space\let\n@xt=\eat
  \else\ifcat\noexpand\next\bgroup\aftergroup{\let\n@xt=\eat
  \else\ifcat\noexpand\next\egroup\aftergroup}\let\n@xt=\eat
  \else\let\n@xt=\copytok\fi\fi\fi\fi \n@xt}
\def\eat{\afterassignment\sanitize \let\next= }
\long\def\copytok#1{\ifcat\noexpand#1\relax\aftergroup\noexpand\fi
  \ifcat\noexpand#1\noexpand~\aftergroup\noexpand\fi

```

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Page A455, line 25 (2/26/93)

rent language" is set equal to `\language`. Whenever a character is added to the cur-

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Page A459, second line of entry for ampersand (3/22/92)

*231–248, 282, 339, 344, 385–386, 428.*

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Page A461, right column (2/19/93)

`*\chardef`, 44, 121, 155, 210, 214, 215, 271,  
 277, 336, 343, 345, 356, 452.  
 $\langle$ chardef token $\rangle$ , 271, 283, 286, 289.

---

Page A467, left column (2/25/93)

Greek, 127–128, 137, 156, 164, 319,  
 358, 430, 434.

---

Page A470, left column (2/25/93)

margins, see `\hoffset`, `\hsize`, `\narrower`.

---

Page A471, left column (2/19/93)

`*\mathchardef`, 155, 199, 214, 215, 271,  
 277, 289, 336, 358, 394.  
 $\langle$ mathchardef token $\rangle$ , 271, 289.

Page A474, right column	(3/22/92)
pound sterling, 54, 339, 428.	
Page A477, right column	(3/22/92)
sterling, 54, 339, 428.	
Page A480, left column	(4/9/92)
$\ast\backslash\text{unhbox}$ , 120, 283, 285, 293, 354, 356, 399. $\ast\backslash\text{unhcopy}$ , 120, 283, 285, 293, 353.	
Page A481, left column	(2/25/93)
whatsits, 95, 110, 157, 226–229, 455.	
Page A483, lines 15–21	(2/25/93)
P.O. Box 869 Santa Barbara, CA 93102-0869 USA. } Don't delay, write today! That number again is T <sub>E</sub> X Users Group P.O. Box 869 Santa Barbara, CA 93102-0869 USA.	
Page B2, line 10 from the bottom	(2/27/93)
$\text{define banner} \equiv \text{'This\_is\_T\_{E}X,\_Version\_3.1415'}$ { printed when T <sub>E</sub> X starts }	
Page B89, line 12	(2/27/93)
In horizontal mode, the <i>prev_graf</i> field is used for initial language data.	
Page B89, line 20	(2/27/93)
$pg\_field, ml\_field: integer; aux\_field: memory\_word;$ [Also delete the definitions of <i>l<sub>h</sub>min</i> and <i>r<sub>h</sub>min</i> , lines 32 and 33.]	
Page B90, line 13	(2/27/93)
$prev\_depth \leftarrow ignore\_depth; mode\_line \leftarrow 0; prev\_graf \leftarrow 0;$	
Page B91, top three lines	(2/27/93)
$\text{if } m = hmode \text{ then if } nest[p].pg\_field \neq '40600000 \text{ then}$ $\text{begin } print("\_(\text{language}); print\_int(nest[p].pg\_field \text{ mod } '200000);$ $print(":\text{hyphenmin}); print\_int(nest[p].pg\_field \text{ div } '2000000); print\_char(",");$ $print\_int((nest[p].pg\_field \text{ div } '200000) \text{ mod } '100); print\_char(");$	

---

Page B344, lines 21 and 22 (2/27/93)

This code assumes that a *glue\_node* and a *penalty\_node* occupy the same number of *mem* words.

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Page B344, line 30 (2/27/93)

```
link(tail) ← new_param_glue(par_fill_skip_code); init_cur_lang ← prev_graf mod '200000;
init_L_hyf ← prev_graf div '20000000; init_r_hyf ← (prev_graf div '200000) mod '100; pop_nest;
```

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Page B353, line 4 (2/27/93)

Kern nodes do not disappear at a line break unless they are *explicit*.

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Page B353, lines 15 and 16 (2/27/93)

```
math_node: break_width[1] ← break_width[1] - width(s);
kern_node: if subtype(s) ≠ explicit then goto done
           else break_width[1] ← break_width[1] - width(s);
```

---

Page B354, lines 6 and 7 (2/27/93)

will be the background plus  $l_1$ , so the length from *cur-p* to *cur-p* should be  $\gamma + l_0 + l_1 - l$ . If the post-break text of the discretionary is empty, a break may also discard *q*; in that unusual case we subtract the length of *q* and any other nodes that will be discarded after the discretionary break.

---

Page B354, line 18 (2/27/93)

```
begin < Add the width of node s to break_width 842 >;
```

---

Page B354, line 22 (2/27/93)

```
if post_break(cur_p) = null then s ← link(v); { nodes may be discardable after the break }
```

---

Page B355, top line (2/27/93)

**842.** < Add the width of node *s* to *break\_width 842* > ≡

---

Page B355, lines 9–14 (2/27/93)

```
hlist_node, vlist_node, rule_node, kern_node: break_width[1] ← break_width[1] + width(s);
othercases confusion("disc2")
endcases
```

---

Page B364, line 10 (2/27/93)

a glue node, penalty node, explicit kern node, or math node.

---

Page B366, line 11 from the bottom (2/27/93)

```
kern_node: if subtype(cur_p) = explicit then kern_break
           else act_width ← act_width + width(cur_p);
```

---

Page B367, line 21 (2/27/93)

```

else if precedes_break(prev_p) then try_break(0, unhyphenated)
else if (type(prev_p) = kern_node)  $\wedge$  (subtype(prev_p)  $\neq$  explicit) then try_break(0, unhyphenated);

```

---

Page B372, lines 12 and 13 (2/27/93)

```

if type(q) = kern_node then
  if subtype(q)  $\neq$  explicit then goto done1;

```

---

Page B376, line 3 from the bottom (2/27/93)

```

cur_lang  $\leftarrow$  init_cur_lang; L_hyf  $\leftarrow$  init_L_hyf; r_hyf  $\leftarrow$  init_r_hyf;

```

---

Page B377, lines 11 and 12 (2/27/93)

```

cur_lang, init_cur_lang: ASCII_code; { current hyphenation table of interest }
L_hyf, r_hyf, init_L_hyf, init_r_hyf: integer; { limits on fragment sizes }

```

---

Page B378, line 5 from the bottom, overriding earlier change (2/27/93)

```

else if (type(s) = kern_node)  $\wedge$  (subtype(s) = normal) then
  begin hb  $\leftarrow$  s; hyf_bchar  $\leftarrow$  font_bchar[hf]; end
  else goto done3;

```

---

Page B394, lines 12 and 13 (2/27/93)

```

var n: 0 .. 64; { length of current word; not always a small_number }
      j: 0 .. 64; { an index into hc }

```

---

Page B404, line 21 (2/27/93)

```

var k, l: 0 .. 64; { indices into hc and hyf; not always in small_number range }

```

---

Page B460, lines 21 and 22 (2/27/93)

```

push_nest; mode  $\leftarrow$  hmode; space_factor  $\leftarrow$  1000; set_cur_lang; clang  $\leftarrow$  cur_lang;
prev_graf  $\leftarrow$  (norm_min(left_hyphen_min) * '100 + norm_min(right_hyphen_min)) * '200000 + cur_lang;

```

---

Page B492, line 6 from the bottom (2/27/93)

```

unsave; prev_graf  $\leftarrow$  prev_graf + 3;
push_nest; mode  $\leftarrow$  hmode; space_factor  $\leftarrow$  1000; set_cur_lang; clang  $\leftarrow$  cur_lang;
prev_graf  $\leftarrow$  (norm_min(left_hyphen_min) * '100 + norm_min(right_hyphen_min)) * '200000 + cur_lang;

```

---

Page C151, line 11 from the bottom (6/26/93)

```

scaled 1.42(1 + max(-pen_lft, pen_rt, pen_top, -pen_bot))

```

---

Page C262, line 15 (6/26/93)

```

string base_name, base_version; base_name="plain"; base_version="2.71";

```

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Page C262, line 29 (6/26/93)

`def gobble primary g = enddef; def killtext text t = enddef;`

---

Page C271, bottom line (6/26/93)

`culldraw p enddef;`

---

Page C272, three new lines for top of page (6/26/93)

`def culldraw expr p = addto pic_ doublepath p.t_ withpen currentpen;  
cull pic_ dropping(-infinity,0) withweight default_wt_;  
addto_currentpicture also pic_; pic_:=nullpicture; killtext enddef;`

---

Page C272, replacement for former line 5 (6/26/93)

`(cut_ scaled (1+max(-pen_lft,pen_rt,pen_top,-pen_bot))`

---

Page C296, line 24 (2/3/93)

the definition of `rp` is changed to `]..tension 4..`, and if `scaled 5pt` is inserted

---

Page C299, line 3 (5/15/92)

a Bernshtein polynomial of order  $n - 1$ .)

---

Page C347, left column (5/15/92)

Bernshtein, Sergeĭ Natanovich, 14.

---

Page C348, left column (6/26/93)

`culldraw, 271, 272.`

---

Page C350, left column (6/26/93)

exponential, see `mexp`.

---

Page C352, left column (6/26/93)

`killtext, 262, 272.`

---

Page C352, right column (6/26/93)

logarithm, see `mlog`.

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Page C361, lines 14 and 15 (2/25/93)

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Page Dxiv, line 13	(4/19/96)
preprocessor converts these into numeric constants that are 256 or more. This	
Page Dxiv, line -1	(4/19/96)
This file contains one line per string, starting with string number 256, then number 257,	
Page Dxv, lines 10 and 11	(4/19/96)
In this case, occurrences of "" in the WEB program will be replaced by 256; occurrences of "This longer string" will be replaced by 257. The symbol @\\$ stands for the numeric	
Page D2, line -17	(8/7/98)
<b>define</b> <i>banner</i> $\equiv$ 'This is METAFONT, Version 2.7182' { printed when METAFONT starts }	
Page D50, line 26	(8/7/98)
<b>if</b> $b > 0$ <b>then</b>	
Page D138, line 14 from the bottom	(3/6/95)
2') Let $Z_k^{(j+1)} = \frac{1}{2}(Z_k^{(j)} + Z_{k+1}^{(j)})$ , for $1 \leq k \leq n - j$ , for $1 \leq j < n$ .	
Page D190, D191, D194, D195	(6/26/93)
[Several changes to the code in sections 415, 416, 424, and 425 were made to METAFONT version 2.71 in July 1991, too numerous to mention here. They are documented in file <code>mf84.bug</code> as bug number 560. We also delete lines 4 and 5 of page D194.]	
Page D216, line 10 from the bottom	(7/15/92)
will be offset by $w_1$ or $w_2$ , unless its slope drops to zero en route to the eighth octant; in the latter	
Page D289, lines 9 and 10	(6/26/93)
$p \leftarrow dep\_list(p)$ ; $r \leftarrow inf\_val$ ; <b>repeat if</b> $value(info(p)) \geq value(r)$ <b>then</b>	
Page D296, lines 8 and 9 from the bottom	(9/13/98)
[Delete these spurious lines.]	
Page D297, mini-index	(6/6/98)
the meaning of <i>loc</i> should be 'macro'	
Page D310, line 7	(8/7/98)
<b>if</b> $(loc = k + 1) \wedge (length(buffer[k]) = 1)$ <b>then</b> $cur\_mod := buffer[k]$	

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Page D363, lines 10 and 11 (3/1/95)

**begin if** (*max\_c[dependent]* **div** '10000  $\geq$  *max\_c[proto\_dependent]*) **then** *t*  $\leftarrow$  *dependent*

---

Page D512, line 13 (11/23/98)

*print\_int(round\_unscaled(internal[year])); print\_char(".");*

---

Page D518, insert new material between lines 7 and 8 (3/20/95)

**while** *input\_ptr*  $>$  0 **do**  
  **if** *token\_state* **then** *end\_token\_list* **else** *end\_file\_reading*;  
**while** *loop\_ptr*  $\neq$  *null* **do** *stop\_iteration*;

---

Page D518, line 18 (3/20/95)

*loop\_ptr*  $\leftarrow$  *cond\_ptr*; *cond\_ptr*  $\leftarrow$  *link(cond\_ptr)*; *free\_node(loop\_ptr, if\_node\_size)*;

---

Page D546, left column (4/11/96)

Stern, Moritz Abraham: 526.