103.4.2 ld2 on Cygwin

During 'make', *ld2* will be created and installed in your $installbin directory (where you said to put public executables). It does not wait until the 'make install' process to install the *ld2* script, this is because the remainder of the 'make' refers to *ld2* without fully specifying its path and does this from multiple subdirectories. The assumption is that $installbin is in your current PATH. If this is not the case 'make' will fail at some point. If this happens, just manually copy *ld2* from the source directory to somewhere in your PATH.

103.5 TEST ON CYGWIN

There are two steps to running the test suite:

```
make test 2>&1 | tee log.make-test

cd t;./perl harness 2>&1 | tee ../log.harness
```

The same tests are run both times, but more information is provided when running as './perl harness'.
Test results vary depending on your host system and your Cygwin configuration. If a test can pass in some Cygwin setup, it is always attempted and explainable test failures are documented. It is possible for Perl to pass all the tests, but it is more likely that some tests will fail for one of the reasons listed below.

103.5.1 File Permissions on Cygwin

UNIX file permissions are based on sets of mode bits for {read,write,execute} for each {user,group,other}. By default Cygwin only tracks the Win32 read-only attribute represented as the UNIX file user write bit (files are always readable, files are executable if they have a *.{com,bat,exe}* extension or begin with #!, directories are always readable and executable). On WinNT with the *ntea* CYGWIN setting, the additional mode bits are stored as extended file attributes. On WinNT with the *ntsec* CYGWIN setting, permissions use the standard WinNT security descriptors and access control lists. Without one of these options, these tests will fail (listing not updated yet):

```
Failed Test           List of failed
-----------------------------------
io/fs.t               5, 7, 9-10
lib/anydbm.t          2
lib/db-btree.t        20
lib/db-hash.t         16
lib/db-recno.t        18
lib/gdbm.t            2
lib/ndbm.t            2
lib/odbm.t            2
lib/sdbm.t            2
op/stat.t             9, 20 (.tmp not an executable extension)
```

103.5.2 NDBM_File and ODBM_File do not work on FAT filesystems

Do not use NDBM_File or ODBM_File on FAT filesystem. They can be built on a FAT filesystem, but many tests will fail:

```
../ext/NDBM_File/ndbm.t       13  3328    71   59  83.10%  1-2 4 16-71
../ext/ODBM_File/odbm.t      255 65280    ??   ??       %  ??
../lib/AnyDBM_File.t           2   512    12    2  16.67%  1 4
../lib/Memoize/t/errors.t      0   139    11    5  45.45%  7-11
../lib/Memoize/t/tie_ndbm.t   13  3328     4    4 100.00%  1-4
run/fresh_perl.t                         97    1   1.03%  91
```

If you intend to run only on FAT (or if using AnyDBM_File on FAT), run Configure with the -Ui_ndbm and -Ui_dbm options to prevent NDBM_File and ODBM_File being built.
With NTFS (and CYGWIN=ntsec), there should be no problems even if perl was built on FAT.