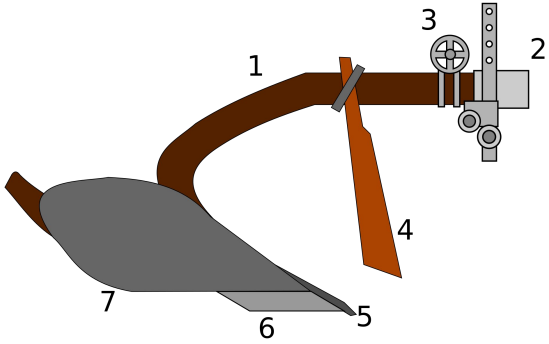
Open merge request

xFitter meeting, 20 Dec 2023

Parameter to control total number of threads

- Global parameter NCPUmax https://gitlab.cern.ch/fitters/xfitter/-/merge_requests/335
- Useful for multiple modules using parallel computation (e.g. CERES and RT)
- Fork() requests are wrapped by ***xf_fork(int NCPU)*** and ***xf_ncpu(int NCPU)*** functions
  - ***xf_ncpu(int NCPU)*** provides number of available CPUs based on request (NCPU) and NCPUmax
  - ***fx_fork(NCPU)*** updates NCPUmax for the child process, after the fork().
- Now implemented for all instances of fork() (CERES, Profiler, RT_DISNC, ReactionAFB)

Ploughshare interface



Interface to ploughshare:

- For reaction APPLgrid, triggered by PloughShare parameter
- Included into default installation script
- Would it be better to prefer using Ploughshare instated of xfitter-datafiles(?)

```
Terminfo = ‘PloughShare=atlas-atlas-wpm-arxiv-1612.03016:

GridName=atlas-atlas-wpm-arxiv-1612.03016-xsec001.appl’
```

Moving to lfs for xfitter-datafiles (?)

- Discussed in summer, merge request for ATLAS files makes xfitter-datafiles repository “lfs” by default
- Can be handled with extra commands
  - git lfs fetch
  - git lfs checkout
- However, observe very slow upload on non-CERN local nodes.
- General discussions on forums suggest to avoid lfs whenever possible

  However, maybe we can investigate opportunity to reactive script do download targetted files only, or move towards ploughshare (at least for applgrids)