

We have been manufacturing Logging Tools
Continuously since 1870.

Many of our 1870 customers still continue using Champion
Tools.

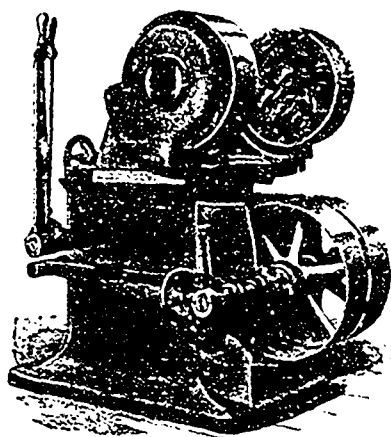
You Know Why

Our illustrated catalogue and price list on application.

Champion Tool & Handle Works,
Evart, Michigan,



ONE BOY AGAINST FIVE MEN



The boy with a Nash Sander will do as much
work, and do it far better than five expert men
can do with the old fashioned sand belt. You can

Figure the Saving Yourself.

It is simply the difference between what you
will pay one boy and what the five men will cost.
If you make any kind of round work, such as
chair legs, spindles, dowel rods, curtain poles,
shade rollers, handles, etc.

You Can't Afford Not to Use It.

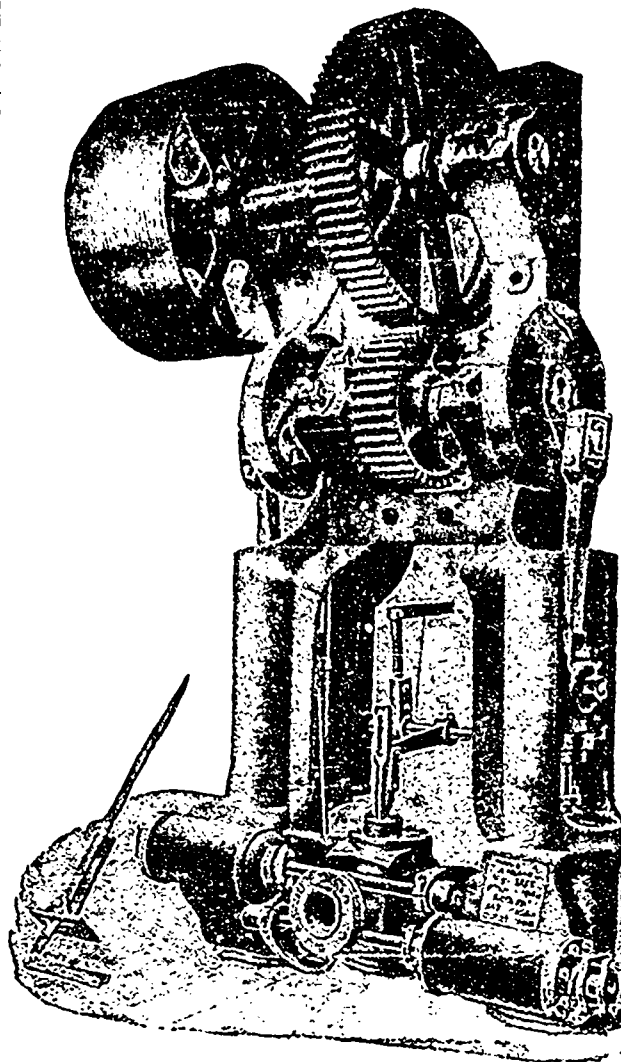
The machine will save its own cost in three
months, besides making an improvement in the
quality of your work that is a profit in itself.

Costs Nothing to Investigate.

THE J. M. NASH SANDER CO.
Lake and Perry Sts., WILWAUKEE, WIS.

SEND FOR ILLUSTRATED CATALOGS.

Manufacturers of Wood-Working Machinery, Automatic Double Saw and Chuck
Machines, 12-Spindle and 4-Spindle Boring Machines.



INMAN POULSEN
& Co.
Oregon Pine Lumber.
Annual Output 75
million feet.
PORTLAND, OREGON,
January 8th, 1903.
ZIMMERMAN & WELLS
MACHINERY CO.,
Portland, Oregon.

GENTLEMEN, In
reference to your in-
quiry regarding the
workings of the Ray
Patent Steam Feed
purchased from you
about eighteen months
ago, we have this to
say regarding the feed,
that it certainly is not
only the best feed that
we have ever used, but
undoubtedly has no
equal to-day on the
Pacific Coast.

We have dropped as
high as twelve ft. 1"
boards in one minute.
In doing this, the car-
riage would have to
travel about 650 feet
and stop and start
twenty-four times in
one minute. The
weight of the carriage,
head blocks and log
would be about ten
tons. This would give
you a pretty good idea
of the Power exerted
by the feed in hand-
ling a load of that size
at such a velocity.

We have run this
feed night and day
since we have had it,
continually, and the
same ropes are still in
service that were put
on when the feed was
mounted. Everything
about the feed seems
to be in as good condi-
tion to-day as the day
we got it. We would
not take it out and put
back our old feed for
ten times the cost of
the new one. You will
see that we are more
than pleased with it.

Yours truly,

INMAN POULSEN & Co

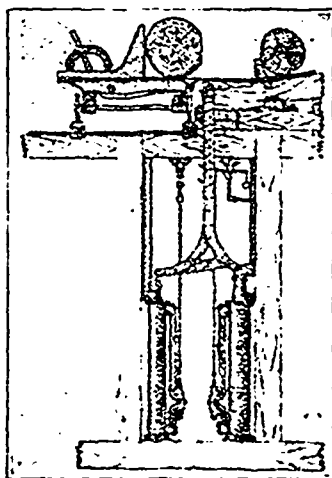
GEORGE R. RAY'S **TWIN ENGINE STEAM FEED**
PATENT With Drum for Wire Rope or Rack and Pinion.

—MANUFACTURED SOLELY BY—

MANISTEE IRON WORKS CO., MANISTEE, MICH.

Plain Tales from the Hills

(NOT BY KIPLING)



Here is a machine. It
is called a Hill Steam
Nigger. With it you
can increase the cut
of your mill three to
five thousand feet per
day. It can also make
the two or three men
now ornamenting your
log deck superfluous
luxuries. Now, stop
and figure out how
much more money you
will be worth in a year
if you can increase
your cut and decrease
your pay roll as we
have said, then you'll
order a Nigger.

Write for Catalogue II

WM. E. HILL & CO.,

415 N. Rose Street,

KALAMAZOO, MICH.

A. F. BARTLETT & CO.

MANUFACTURERS OF

Gorliss Engines
Slide Valve Engines
Saw Mill Machinery
Steam Pile Hammers
Mining Machinery, Etc.

WATCH THIS SPACE FOR SPECIAL ATTRACTIONS.

WRITE FOR CIRCULARS AND CATALOGUES. WE BUY
AND SELL SECOND-HAND MACHINERY.

830 SO. TILDEN ST., - SAGINAW, MICH.