

WILLIAM GLEASON,

Manufacturer of Machinists Tools,

OFFICE, BROWN'S RACE,

Rochester, N. Y., Feb 17th 1889

Dear Son

your letter of 3rd was received
I was well pleased to hear you speak of your
progress in your studies and am
anxiously looking forward to the time
when you will be through and again in
the harness. Andrew is making good
progress at the trade he will be a very
good Machinist by the time that you
are through. We have all the work that we
can do. at fair prices and are steadily
but slowly gaining on the Road to independence^{no}
when we are all to work. it will be a big step
towards the final end aimed at. One thing
that encourages me is that all the other tool
builders are dull. and I have so much
work. I don't mean that I am glad that they are
dull only as a comparison. it looks good
to be so busy. it shows that the tools of
our make are on the top shelf as far as
improvements and quality goes.

2

Rochester, N. Y.,

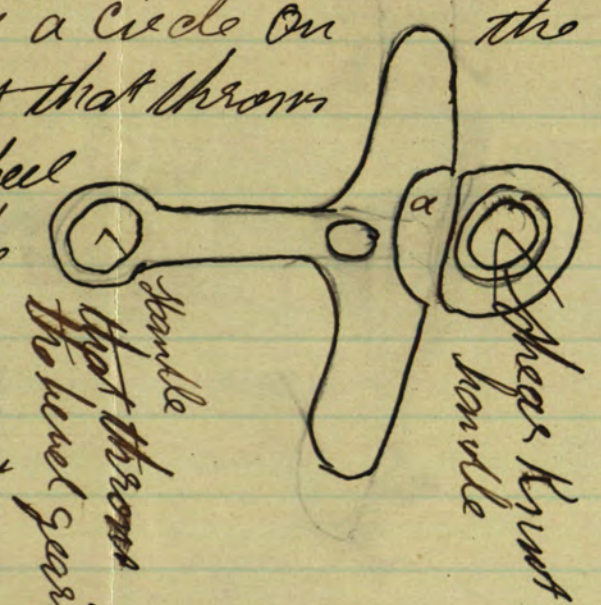
188

the improvement that Kate mentioned on the Lathe feed. is about as follows I don't put the frogs in the head as usual but simply one gear on the main spindle. And one on the stud. to cut left hand threads I have made a quadrant with two flats at an angle of about 45 deg to each other and use two studs much the same as other makers so far except a slight difference in design the friction feed is reversed in the apron there is two here gears on the screw facing each other and one between them they are far enough apart so that when thrown central which moves them end ways $\frac{1}{2}$ " they are out of mesh and entirely disconnected from the feed works so that when the screw is revolving they are not driving anything there is a hub on the end of the gear nearest to the shear Knut similar to the old one. it is held in a bracket similar to the old one only it is not bolted to the apron but is fitted in to a frame similar to shear Knut frame with

3

Rochester, N. Y.,

Slide horizontally insted of vertically by cutting some teeth in the brackett making a Rack of One Edge. and running a shaft through the Apron with some teeth On the end Meshing in to the brackett. With a handle On the Out side a movement of handle throws the Meere gear in Or Out of mesh as desired. so far it is simply a feed Works. With a reverse of feed is apron desirable On long lathes short of it any particular Meritt On short ones Now Comes the improvement the handle that throws the gear insted of being a straight lever is made with a segment of a circle On the Outer end and On the shaft that throws the Meere Runt is a little Wheel with One side flatted when the lever is centered and the gears disconnects the gap in lever at a is at the Meere Runt handle and then and Only then can the Meere Runt be thrown in



WILLIAM GLEASON,

Manufacturer of Machinists Tools,

OFFICE, BROWN'S RACE,

Rochester, N. Y., _____ 188

Making a complete Lock Without the addition
of a single piece of anything added except the
little blank Wheel on the Nut Handle and the
enlargement of the Lever it is a neat looking
rig and all together I think it one of the best
improvements that is out and puts one
a head of everything so far. We will be expecting
you home at vacation

Yours Father
William Gleason