

Fig. x represents an Exact Full Size section of a 60-inch Circular Saw with 46 teeth four inches apart. Fig. 6, 6 show recesses cut one half through the Saw and the other half through the Tooth or Mouth-piece for the upper portion of the front end to pass through when inserting them over the Inserted Tooth. 2, 2 are the mouth-pieces for holding the Planer Teeth, one being represented in dotted lines over the Inserted Tooth.

- 3, 3 shows the Planer Teeth, one of them being in position.
- 4. 4 shows the Inserted Teeth, one in position and the other in dotted lines the position that the tooth will be in when it is being inserted into the socket.
- 5, 5 shows the Wedges; one forced up into position for holding the Tooth or Mouth-piece; the other one is represented back in the recess as it will be when the Mouth-pieces or the Teeth
- 7. 7 show square holes through the Mouth-pieces and teeth made to admit a Steel Lug attached to a Tapering Key for removing and replacing them.
- 8, 8 show the full size of Dust Chamber when as an Inserted Tooth or a Planer Saw.
- ABTI will be seen that the Dust Chamber in this Saw contains more space than any other Saw of equal size and number of Teeth, Solid Saws not excepted.

EMERSON'S NEW PATENT UNIVERSAL SAW:

Being adapted for both heavy and light feed for all climates, in both hard and soft timber (for our largest saws, teeth are inserted as close as 4 inches from point to point) possesses more advantages than any other saw in the world. We ask practical sawyers and lumbermen to carefully examine the above illustration and description. You will see there are no rivets to be headed up in fastening teeth, nor to be driven out in removing them. Neither teeth nor mouth pieces can fly out without breaking the saw, so that they are perfectly safe. If you buy an Inserted Toothed Saw of this kind, and at any time you wish to convert it into a Planer Saw, send us a set of worn out teeth, and for 15 cents each, we will make them into a set of mouth pieces for the same saw that they came out of, and for \$17.50 additional we will send you 500 extra bits, and you will have a Planer Saw with no further expense. Twenty-five years in manufacture of Inserted Toothed Saws, and ten years of it in manufacturing our Celebrated Planer Saws, have demonstrated to us that for Frozen Timber, Pitch Pine or Hardwood, our Planer Saw has no equal. And for the softer timber and Heavy Feed, our Clipper Saws have no superior. For fast sawing it has always taken the front rank.

When the Clipper Teeth are in the saw, it will be two inches larger than when the Planer Teeth are in, and the Clipper Teeth will stand more feed than when the Planer Teeth are in it. If you purchase at once a saw with both kinds of teeth and mouth pieces, with 500 extra Saw Bits, you are at once fixed up for a winter and a summer saw, and for both Hard and Soft Wood. A 60 inch Patent Combination Saw can be changed from a Planer to a Clipper and vice versa inside of five minutes. In short, it can be changed in less time than any Inserted Tooth Saw in the world. Another and important advantage is, that if you have a sawyer who is experienced with any kind of Inserted Toothed Saw, you can furnish him the saw that he wants. Again, it at any time you are not fortunate in having an experienced sawyer, you can put in the Planer Teeth, and an inexperienced man can go right along with the sawing, and no time will be lost. If you have mixed timber to saw requiring wider or narrower points, (i.e. more or less set in the saw,) you can change in less than five minutes and go right along. If by accident the Clipper teeth get damaged or badly dulled by running into iron or grit you can put in the Planer Teeth and go right along; and the damaged Teeth be put in order at any convenient time.

AMASCUS TEMPERED THI

American Manufacture! Solid or Inserted Tooth! 48 Inch Saws, 12 Gauge! 54 Inch Saws, 11 Gauge! 60 Inch Saws, 10 Gauge! All a Pronounced Success in Hard and Soft Timber!

PRICES REDUCED

OF DAMASCUS TEMPERED SOLID SAWS

On the 15th of January, 1884.

SEND FOR NEW DISCOUNT.

50 Inch 9 and 10 Guage Damascus Tempered Solid Saw Used on 20 Horse-Power Champion Portable Saw Mill, running 400 Revolutions per Minute.

Materous Engine Works Co.

My new to-guage Saw works splendid; it saves for me (over the 7-guage Saw) in every standard, 20 feet of lumber, and it runs smoother, cuts cleaner, can be run with one-half the pressure of steam that a 7-guage requires, and is easier kept in order. I would use no other than 9 and to-guage Saws unless the saw is larger than 50 inches, then I would use theker saws, according to their size. Several mill men have seen my saw run, and they pronounce it the lightest and smoothest running saw they have ever seen. I can save my labor for running the mill with a to-guage Saw over the 7-guage. Yours truly,

S. F. CHENEY.

Address: Waterous Engine Works Co'y, Brantford, Canada.