eight of three stories, lumber sheds, umber stacks, etc., etc.

THROUGH THE SHOPS.

During nearly a week's stay here I have made daily visits to this hive of industry, and its hum has become music to my ears—a music, I am sorry to say, that is seldom heard south of Mason & Dixon's line. My first round was made with one of proprietors as guide, but there is always a certain restrain among employes when the employer is about, so I got *carte blanche* and upon other days wandered at will through the great works. Of course, the very existence of so complicated a concern depends upon system, method, order, and amid all this apparent chaos, the clatter, smoke and confusion, there is perfect system—"harmonious discord." In the first place, there is a gate-keeper who checks in and out every workman, and each department has its foreman, who is responsible to the superintendent, who is responsible to the president. In all this ores of timber there is not a plank whose lumber age is not recorded; in all this world of wheels there is not one but can be picked out upon the order of the foreman the wheel room. Every piece of timber goes through four inspections before it reaches the workman, and no material has run the gauntlet until the year's guaranty of the *finished* work has expired. The lumber is obtained mostly from Indiana and Michigan, though some second-growth hickory, used exclusively in axles, is obtained from Kentucky. Last year the factory paid out for lumber $132,062. This year it has paid for the same up to August 1st, $136,043, and has had at one time on the tracks awaiting unloading 135 cars.

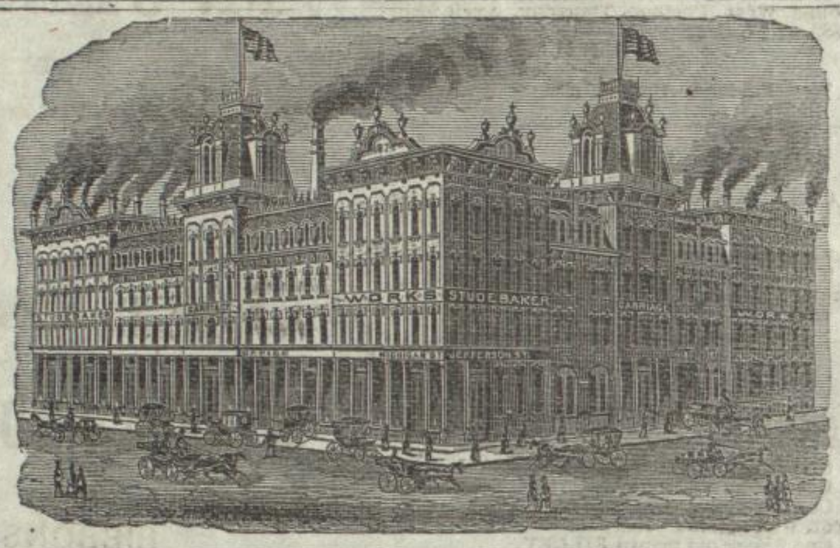
HOW WHEELS ARE MADE.

Plato has declared that the construction of a perfect ideal circle, with all points equi-distant from the centre, is beyond the reach of human ingenuity. Philosophically and mathematically considered this is probably as true to-day as when Plato wrote, but practically the perfect wheel is *un fait accompli*. Beginning with the hub, the sawed block is turned upon a lathe to something of the proper shape and laid away for two or three years to complete the *process of seasoning*. If in that time it has cracked and split it is rejected; if not, it is cut down to the proper shape and size and passed to the drop auger and chisel that mortice the holes for the spokes. In two minutes—two men boring and morticing from eighty to ninety a day. Iron bands are then put upon the hub, which, after steaming is ready for the spokes. These are driven home by two or three strokes of a trip-hammer driven by steam and worked by a treadle. the hub is then revolved upon a fixed centre and all the spokes are cut equal lengths by a fixed saw. By turning the wheel and pressing a lever the spokes are tenoned ready for the felloes. These are fitted on by hand, and the wheel is revolved upon an eccentric, and the wheel dresser cuts down the felloes to the width of the tire, finishes two faces and rounds the edge of the wheels. The wheel is then coated with hot linseed oil by a peculiar process of *their own*, whereby the pores of the wood are thoroughly filled, and then passed *to the dry-rooms*, whence it is taken after some weeks to the tire shops. Here are two glowing furnaces that heat the tires. In a pool of water is an iron platform, the glowing tire is thrown upon it, tongues and hammers are *applied*, and in less time than it takes to tell it, *the tire* is on, and boys with drop bits are boring holes in it for the nails. A conical-shaped augur bores the hub by mearly pressing a lever, and the wheel is ready for the boxing. The boxing is smeared with a slushing of linseed oil and lead, and placed in position upon the hub and forced in by a hydraulic pressure of 120 tons. If there is any defect in boxing, hub or band, such a pressure is sure to disclose it, but if the boxing go home without anything giving way, it is there to stay until the corroding tooth of time shall eat the wood away. A stock of 3,000 or 4,000 wheels ahead of the trade is kept constantly on hand, and no unseasoned material is ever allowed in any of the work.

As in the manufacture of the wheel, so with that of every other part of the wagon—there is order, system, intelligent supervision, the best of material, and all the mechanical helps that genius can contrive and capital procure.

LABOR OMNIA VINCIT.

The Studebakers have succeeded by not only making the best articles in their line, but by studying the wants and tastes of their customers, and by representing their wares exactly as they are. Confidence is a very necessary article in trade, and to such an extent have the Studebakers won it that their special order trade alone would be a fortune to any manufacturer. You want such and such a vehicle, made of such and such material. You must rely on the integrity of the manufacturer in having made exactly what you want. No other manufacturers get so many of these special orders as do the Studebakers. They pour in not only from all over the country, but from foreign countries; and the fact that the goods manufactured "for the trade" are as conscientiously made as those for "special orders" is increasing the latter almost to to the full extent of the carriage works. Can more be said for any manufactory in the world?



The Studebaker works, while a world within themselves, draw upon all the mechanical world for its improvements in their line. While invention is constantly going on within, they are constantly drawing upon invention without. The skein-setter, the apparatus for putting on tires, the hydraulic press for forcing in boxing, and O'Brian's priming, are inventions that have not only brought down the cost of wages, but have greatly increased their value. Under the old hand-made, shop-work system, it cost them three dollars a set to put in the boxes; it now costs less than 30 cents, and the work is done one hundred per cent. better.

Wagons are now sold at $70 that formerly cost $140, and the durability and finish of the machine-made wagon are incomparably superior to the shop-made. True, there is much cheap machine work of a worthless character, thrown upon the market at figures impossible with first-class manufacturers like the Studebakers, but that is the fault of the maker and not the machinery. The proper use of machinery is not only to increase production, but to improve the quality of production, and a character of work is turned out from this manufactory that is impossible with the unaided human hand. Every piece of wood and iron is marked by rule, and shaped by machinery so fixed that there can be no variation. This, with the excellent material used, insures *the perfect fit of* every part, and the consequent perfection of the whole. No timber is used until it has seasoned at least three years, and all axles are made of the best quality of hickory, carefully selected and rigidly inspected. Every wagon is insured for one year, but such is the character of the work that the insurance scarcely costs the manufacturers ten cents to the wagon. In fact, the world wide reputation merit has won for their work is the best guaranty of the superior quality of their productions.

THE CARIAGE FACTORY.

In addition to the immense wagon works, the company have in the heart of the town, and occupying one of the handsomest five story brick buildings, a carriage factory, employing 225 hands, and turning out nearly 190 vehicles per week. It is under a separate management, thorough and complete in all its departments, embodying all the skill, mechanism and art required for the production of any and every style of fine carriage, buggy and spring wagon. So popular has become the Studebaker carriage, that this department is largely engaged in filling special orders. The two factories are connected by telephone and both are run by the same company, J. F. Studebaker, the secretary, and W. F. Studebaker, son of "P. E." having charge of the carriage manufactory.

A HAPPY FAMILY.

Of course, in a business so extensive, the proprietors must have the assistance of many thousand heads and hands, and in no other respect have the Studebakers displayed more sagacity than in the selection of able and faithful assistants, and infusing into their workmen an interest in their work that partakes somewhat of a sense of proprietorship. Education is a cheap defense of large manufactories, no less than of nations; and, appreciating this fact, the Studebakers, on Christmas day of the Centennial year, instituted the custom of giving to each of their employes a year's subscription to any weekly paper he might select. This custom is still kept up, and though it costs about $1,500 per year, the proprietors consider it money well spent, as it has enabled the workmen to inform themselves upon the general depression that has until recently pervaded all manufactories, and thus prevent discontent, murmurings and strikes. Neat and convenient cottages are provided for the workmen at a rental of $5 per month, and many of them have purchased homes of *their own*. The foremen have been selected from the rank and file, and are in thorough sympathy with the men under them. Recently Captain H. L. Hinds, superintendent of the wagon works died, and one of the workmen was promoted to his place. The prospect of such promotion is a great incentive to good service, and, judging from outward appearances, I am disposed to include the whole army of employees in the happy family of the Studebakers.

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NOTICE FOR PUBLICATION

LAND OFFICE AT SALT LAKE CITY, UTAH, March 18th, 1882.

NOTICE IS HEREBY GIVEN THAT THE following named settler has filed notice of his intention to make final proof in support of his claim, and that said proof will be made before the Land Office, at Salt Lake City, on April 26, 1882, viz: William A. Thomson, for the S half S E one-fourth Sec. 20 and N half N E one-fourth Sec. 21, T 1 N R 1 W.

He names the following witnesses to prove his continuous residence upon and cultivation of said land, viz.

William A. Barron, of Salt Lake County, Utah; Sames Gillspie, of Salt Lake County, Utah; James Thomson, of Salt Lake County, Utah, Christopher J. Thompson, of Salt Lake County, Utah.

w51 H. McMASTER, Register.