this summer, and has a pay roll of $46,000 per month. The mill capacity is 20,000 feet in twenty-four hours. The season's output is 1,500,000. A shingle mill is operated in connection, with a capacity of 15,000 per day.

O. W. Hobbs, a contractor, also operates a saw and planing mill on First avenue. His circular saw has a capacity of 10,000 feet per day.

A BAND RESAW-GANG.

A novel machine is being built by W. B. Mershon & Company, of Saginaw, Mich., for the Firstbrook Box Company, Limited, of Penetanguishene, Ont. It is described by the makers as a band resaw-gang, and is intended for resawing thick planks or flitches into

A BAND RESAW-GANG.

five boards of equal thickness, the machine having four blades. The saw mill in which it is to be installed manufactures exclusively box material from short logs, second growth pine, etc. The equipment in this saw mill is unique and consists of the following: What was originally a twin circular rig made by the Rodgers Iron Works, of Muskegon, Mich., the round logs being placed on a spiked chain and carried past the saws by said chain, the logs being prevented from turning by spiked press rolls resting on the top thereof. This machine is used, supplied with one circular saw only, thus delivering the logs flatted on one side. These are then placed upon a travelling bed and carried by a Saginaw style F pony band mill, the second side flatted, the cants resulting being 5 inches in thickness with two parallel planed faces. These flatted cants, as well as the slab remaining, are then fed through the band resaw-gang and the cants converted into five one-inch boards and the slabs and waney portions made into as many boards as the thickness will yield. The band resaw-gang is very well suited for this work, and the following description may be of interest to our readers.

The band mills themselves are generally similar in design to the Mershon standard perfected band resaw. They are mounted on eye beams, as shown in the illustration, and each has a transverse adjustment by means of a screw; said adjustment is very easily operated and very accurate. This arrangement will admit of sawing flatted cants of any thickness into boards as thick or thin as desired. The feed works consist of a continuous fence, in which are mounted numerous driven feed rolls, thus removing all of the friction from said fence. The stock resawn is retained in position against said fence by the action of the yielding pressure rolls of large diameter, which are also powerfully driven. These press rolls will yield three inches or more without any adjustment whatever. They, however, are provided with suitable adjustments so they can be retained in position at any distance from the fence desired. Cants as thick as ten inches may be sawn on this machine. The machine may be built so as to comprise any number of saw mills desired, and where a gang can be used in a saw mill to advantage, a machine of this kind, having unlimited capacity, will add wonderfully to the output of the saw mill plant.

A band resaw-gang with five saws supplied with cants six inches in thickness and feeding at the rate of 80 feet per minute, would mean a steady stream of bunches of six boards travelling at 90 feet per minute, practically all day long. If the boards averaged but nine inches wide, this would mean 360 feet board measure per minute, or, if there be no lost time whatever, 216,000 feet board measure one inch boards per day. Allowing ample time for lost time, changing saws, etc., if the single band mill could keep it supplied with cants, 150,000 per day could be safely figured, and this removing a saw kerf of 1-16 inch. It has been supposed it was impossible to secure the greatest capacity with the least possible waste in saw kerf, so that the above would indicate that this machine actually accomplishes what is apparently impossible.

METHOD IN THE SHOP.

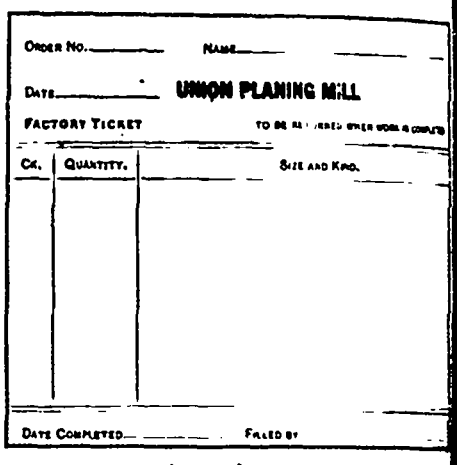
BY H. T. G., IN THE WOOD-WORKER.

We all have a natural antipathy to red tape, and justly so. Red tape is the bane of the factory man's existence; and yet we must have system in every well-conducted business, so that the manager may be manager in fact as well as in name, and in order that he may know how the various departments in his factory are being conducted, besides having a reasonably clear idea of the profits of such shop. The simpler the plan, the better for all concerned. It shall be my purpose to outline a simple system of conducting a wood-working establishment, so that costs may be figured and work indexed for reference.

1. We have found it of great advantage in our factory to number all orders consecutively, and every order ticket or shipping slip referring to said order bears the same number. The saw bills and the material also are numbered, thus avoiding much confusion of orders, especially when there is more than one for the same customer. Another advantage is found in keeping the time and materials and in checking up invoices, the order number explaining what job the material is used on. It is very convenient to index the order book for reference to back orders, and the time thus employed is well spent.

2. Have all order slips returned to the office as soon as any piece of work is finished, so that shipping orders may be in the hands of the shipping clerk as soon as possible. This prevents delays and enables the one in charge to keep the work well under control. The shipping ticket, if marked so as to indicate by name of shop or the workman's initial, where the various articles may be found, will facilitate shipping and avoid numerous questions.

3. The shipper should each night return all slips for goods delivered during the day, and the orders be checked up and priced for billing the next day. Have a place on the slips where the name of teamster and date are filled in, so



SHOP ORDER SLIP.

that if any claim of shortage or error should come in there is a record of when the goods were sent and by whom. The driver also has a trip ticket, which he requires the consignee to receipt for his material; that is, when a responsible body is on the job to give receipt. These trip tickets are filed away as they are returned, and help to settle many a dispute.

4. It is well in consequence to assort and file all old factory and shipping tickets, and preserve for about a year, as there are often notations or sketches on them that are not found in the order book, and they prove helpful in duplicating an order or investigating a shipment. The advantages of slips over the order books is evident in the method of filing the returning of slips to the office, and the convenience of handling small orders; besides, it avoids confusion to have orders accompany the goods. In shipping house trim the shipper can check the goods from the factory ticket and avoid the possibility of part being forgotten.

The expense of such a system is light, as no elaborate style or quality of ticket is needed. The time saved by obviating the waiting for, running back and forth after order books, and the convenience of making out orders at any time without delaying any one, more than pays for the slight cost of the tickets. Indeed it is a question whether the cost of good durable books would not equal that of the slips. After having used this system it would be hard to persuade one to go back to the books again. Herewith is a copy of the order ticket, which is of tough manilla paper, about 7 inches long and 5 inches wide. Shipping slips are the same, but on white instead of buff paper to avoid confusion.