

where they remain but a short time, generally but a few hours, as the company finds it difficult to fill its orders, and, except in the event of delay in the arrival of steamers, has but little need at present for extensive storage room. From here the barrels are rolled in rapid succession to the edge of the dock, where they are allowed to slide down a gang plank to



IN THE WAREHOUSE.

the freight deck of the steamer, on which they are piled up in tiers as compactly as possible. A thousand barrels of lime occupy considerable space, and the shipment of that quantity daily supplies a considerable portion of the freight carried by the steamers running on that route, scarcely a day passing without one or more of them being seen at the dock receiving a cargo.

The process of causing the lime to settle down in the kiln after drawing is the most interesting sight to be witnessed at the works, and this is seen to the best advantage at night, when the outer darkness contrasts vividly with the brilliance of the interior of the kiln when the furnace door is open. When a drawing is made the heavy iron plate which serves as a door for the furnace, and which slides up and down before the opening by means of a counter weight suspended from a pulley, is lifted and one can gaze directly into the heart of the kiln, glowing with an intense white. He can see the void left at the bottom by the lime drawn off, and the lower edge of the superheated rock above, held suspended in its place by the expansion of its bulk caused by the intense heat. The first duty of the fireman is to cause the lime to fall and fill up the bottom of the kiln, and this he accomplishes by poking it with a long iron rod. Sometimes the rock falls easily, but at other times he is compelled to work at it for several minutes through the openings in both sides of the kiln, the perspiration rolling down his face in streams, the end of the iron rod becoming heated to an intense fiery red and the handle often becoming too hot to be longer held in the hand. A new rod is then taken and the patient fireman works away at his task with as much deter-

mination as that displayed by the imps depicted in the Calvinistic pictures of a century ago, who were kept busy maintaining a hot fire for those poor mortals who had died without adopting Calvin's peculiar ideas of theology. When the rock is hard to start the fireman is pleased, as it is a sign that the kiln is in excellent condition, but he has no desire for it to stick too long. Finally it comes down with a rush, and how it sparkles! The intense white turns gradually to the palest green as it comes in contact with the air drawn in through the furnace opening. The fireman then takes sticks of cordwood from a pile near by and thrusts them into the furnace, and so intense is the heat that the instant the wood strikes the bottom it bursts into a sheet of flame. One of the new kilns will consume about one and one-half cords of wood per day with its two furnaces, and burn fifty per cent. more lime than the old stone ones with four furnaces and twice the quantity of wood. Still there are old lime burners who will have nothing to do with "them new-fangled concerns," and stick to the old style, and will probably continue to do so until they have been run completely out of the business.

A most important part of the work is the barrel factory and stave mill. Hitherto barrel staves and heads have been made at the mill in Puyallup valley, but this season the machinery is being moved to a new mill situated on the point just north of the residences of the workmen, as shown in the sketch of the



DRYING A BARREL AND REMOVING HOOPS.

works given on another page. Barrels are made of cottonwood and cedar, chiefly the former, and the material passes through quite a number of manipulations before it reaches its final form. Cottonwood