

OUR MODERN WHITE LEAD FACILITIES AT CHICAGO - Taken from Chameleon, pages 38-43
March, 1910 issue

The Sherwin-Williams Company has for a long time produced the most important raw materials that enter into its manufactured products. That white lead has been left until nearly the last is due to the fact that it has required immense property, large investment and considerable preparation to install a corroding plant. But now, after our recent purchase of twelve acres of land adjoining our present plant property at Pullman (Chicago), which gives us a total of about thirty acres, we are able to set aside space for a lead plant and still leave room enough to enlarge it, as we expect it will be necessary after we are once well under way in the business.

In starting a line of manufacture, the first thing to do is to have the right man in charge. We have secured as superintendent of the plant a man who has spent 26 years in lead manufacturing under the Old Dutch process method. This man is Mr. L. G. Burr, whose photograph was shown in the last number of the Chameleon, and who at this time has plans well under way for making our new venture a distinct success in every particular. The department foremen are all practical men of many years of experience, and as a consequence we are well equipped in this particular line.

Our consumption of carbonate of lead is so great that we can maintain in constant operation a lead manufacturing plant of ~~xx~~ considerable size. But as it is the policy of the company to make, sell and distribute a complete line of everything in the paint and varnish business, we feel that in addition to manufacturing lead used as an ingredient in our many paint products, we are called upon to offer to our trade a strictly pure grade of white lead of such quality as will be recognized as the leading brand of the country. For this reason we have adapted the Old Dutch process explained in detail in the last Chameleon.

Our new lead plant is well under way and the construction work is being pushed bigorously, so that we expect to have all buildings complete, all equipment installed and in active commission early in the Summer. In fact, we expect to be in a position to ship Sherwin-Williams Old Dutch Process (O D P) Strictly Pure White Lead not later than September 1st, and we are prepared to book small orders now for delivery on that date.

In our illustrations we show two exterior views of the plant as it now stands. The building which is practically complete is the stack house. It is 213 feet long and 84 feet wide and contains 16 stacks, each stack with a capacity of 10,000 pots - each pot containing about 25 pounds of lead.

The mill building, the walls of which are only a little above the first story, is 150 feet long and 75 feet wide, and when completed will be four stories high. This building will contain the grinding machinery, casting kettles, the buckle casting machines, etc

In the group illustration shown on our two center pages we show a number of views which have been taken around the corroding building, and in order to give our readers a better understanding of each photograph we have numbered them and the following is a description of each view.

Of course, the basis of all white lead is pig lead, and view No. 1 shows a part of the large supply of pig lead which we now have on hand, and are putting into shape to put into the stacks. In the piles which can be seen in this picture there is a total of about 3,200,000 lbs., which represents, including labor, approximately \$150,000.00 investment. All of this lead is the best double refined, silverized lead that is obtainable, and from analyses which we have received from our Chemical Laboratory it contains an infinitesimal amount of impurity. The significance of this is apparent when you

OUR MODERN WHITE LEAD FACILITIES AT CHICAGO - Cont'd

consider the fact that only the purest of lead may be used in the Old Dutch process, whereas, in all other processes most any kind of lead will answer the purpose. The conclusion naturally is that the purest white lead in the market is therefore made by the Old Dutch process.

In view No. 2 is shown a pile containing 15,000 or 20,000 earthenware corroding pots and is only a small part of the total number which are rapidly being set into the stacks at this time. When our stacks are completely filled we will have used about 160,000 of these pots, and as each pot will contain about 25 lbs. of lead you can easily figure that we will have over 4,000,000 lbs. of lead in the stack when completely set up. While there is some breakage each time that these pots are used, still, it is quite small and they are used over and over many times.

View No. 3 does not require any special mention, as it only shows a portion of the end of one side of the corroding building, and also shows 25,000 or 30,000 more of the corroding pots shown in view No. 2.

Views No. 4 and No. 6 show the upper deck between the two rows of corroding stacks, and the reader will notice the rail-guard for the stairways which lead to the decks below. There are three of these decks and their purpose will be better explained in connection with view No. 8. The upper deck is used only by the foreman or superintendent to enable him to readily direct the operations going on in various stacks on each side, and also to enable him to conveniently reach the top of each stack for the purpose of taking the temperatures. These two pictures show the two traveling cranes, which not only operate backwards and forwards through the entire space shown, but which also are so arranged as to leave the bridge behind to travel out over any individual stack. The work of these cranes is very important, as it makes the handling of material both into and out of the stacks very economical. When our mill building is completed, the buckle machine and a casting kettle will be placed in that building, and these cranes, leaving the corroding building and passing around the curve, will take the buckles from the mill building and deposit them in quantities of 3,000 lbs. at a time into any stack which we are filling. At the same time they will take the corroded buckles from the stack and deposit them conveniently in the separating house of the mill building. With these cranes we will be able ~~to~~ to put lead into the stack and also take it out as economically, if not more so, than any concern in the country in this line of business.

View No. 5 shows the interior of the stack, the tanbark beds upon which the pots are set, some of the pots in position and filled with lead, and three of the decks which are used for storing empty pots. It also shows the crane in the operation of lowering a wheelbarrow of buckles down into the stack for use in filling these pots. One man is shown in the act of putting buckles into the pot, but this is not very clear. When the bed of bark shown is entirely covered with pots which are filled with lead, a layer of boards is placed over the top of it, and upon that layer of boards is placed another bed of tanbark, upon which comes another layer of pots, and so continuing until the entire stack is filled to the top with successive layers of bark, pots and lumber.

View No. 7 shows the casting, kettle and buckle machine in its temporary location, and through the doorway can be seen a part of the large supply of pig lead, explained in description of view No. 1. This picture also shows the hoisting hook of one of the traveling cranes, ready to attach to a wheelbarrow loaded with buckles and ready to be taken into one of the stacks. The buckle machine is simply an endless chain of moulds, upon which we will cast approximately 75,000 to 80,000 buckles a day. You will also notice a pig of lead being fed into the kettle. Having purchased our pure pig lead it is only necessary to melt it down and cast it into these buckles in order to put it into convenient shape for corroding.

MODERN WHITE LEAD FAC. AT CHIC - Cont'd

View No. 8 was taken on one of the lower decks and shows how we store empty corroding pots. It also shows the stairway leading to the deck above. The machinery which is shown is of no special moment, being the only temporary drive for the buckle machine. When each stack is gone, instead of going to the expense of taking all our corroding pots outside and filling them, they will be rapidly placed on one of these decks and stored there until the stack is reset, when they will be very handily packed back into the stack. The saving by this method will be considerable.

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Our Modern White Lead Facilities at Chicago.

THE Sherwin-Williams Company has for a long time produced the most important raw materials that enter into its manufactured products. That white lead has been left until nearly the last is due to the fact that it has required immense property, large investment and considerable preparation to install a corroding plant. But now, after our recent purchase of twelve acres of land adjoining our present plant, property at Pullman (Chicago), which gives us a total of about thirty acres, we are able to set aside space for a lead plant and still leave room enough to enlarge it as we expect will be necessary after we are once well under way in the business.

In starting a line of manufacture, the first thing to do is to have the right man in charge. We have secured as superintendent the man who has spent 26 years in lead manufacturing under the Old Dutch process method. This man is Mr. L. G. Burr, whose photograph was shown in the last number of THE CHAMELEON, and who at this time has plans well under way for making our new venture a distinct success in every particular. The department foremen are all practical men of many years of experience, and as a consequence we are well equipped in this particular line.

Our consumption of carbonate of lead is so great that we can maintain in constant operation a lead manufacturing plant of considerable size.



The New Mill Building in the foreground to be four stories high.

But as it is the policy of the company to make, sell and distribute a complete line of everything in the paint and varnish business, we feel that in addition to manufacturing lead used as an ingredient in our many paint products, we are called upon to offer to our trade a strictly pure grade of white lead of such quality as will be recognized as the leading brand of the country. For this reason we have adapted the Old Dutch process explained in detail in the last CHAMELEON.

Our new lead plant is well under way and the construction work is being pushed vigorously, so that we expect to have all buildings complete, all equipment installed and in active commission early in the Summer. In fact, we expect to be in a position to ship Sherwin-Williams Old Dutch Process (O D P) Strictly Pure White Lead not later than September 1st, and we are prepared to book small orders now for delivery on that date.

In our illustrations we show two exterior views of the plant as it now stands. The building which is practically complete is the stack house. It is 213 feet long and 84 feet wide and contains 16 stacks each with a capacity of 10,000 pots—each pot containing about 25 pounds of lead.

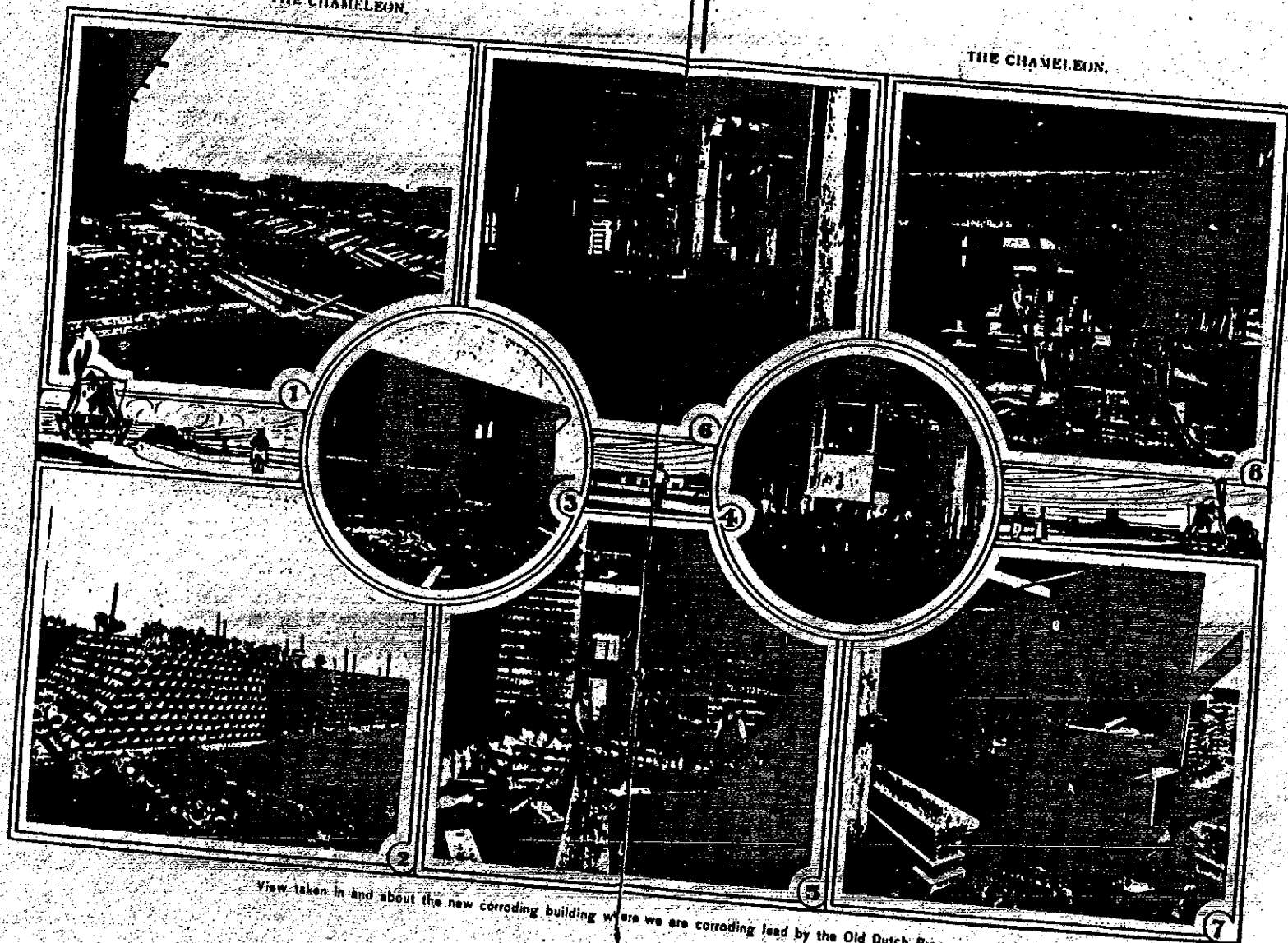
The mill building, the walls of which are only a little above the first story, is 150 feet long and 75 feet wide, and when completed will be four stories high. This building will contain the grinding machinery, casting kettles, the bucket casing machines, etc.

In the group illustration shown on our two center pages we show a number of views which have been taken around the corroding building, and in order to give our readers a better understanding of each photograph we have numbered them and the following is a description of each view:

Of course, the basis of all white lead is pig lead, and view No. 1 shows a part of the large supply of pig lead which we now have on hand, and are putting into shape to put into the stacks. In the piles which can be seen in this picture there is a total of about 3,200,000 lbs., which represents, including labor, approximately \$150,000.00 investment. All of this lead is the best double refined, silverized lead that is obtainable, and from analyses which we have received from our Chemical Laboratory it contains an infinitesimal amount of impurity. The significance of this is apparent when you consider the fact that only the purest of lead may be used in the Old Dutch process, whereas, in all other processes most any kind of lead will answer the purpose. The conclusion naturally is that the purest white lead in the market is therefore made by the Old Dutch process.

In view No. 2 is shown a pile containing 15,000 or 20,000 earthenware corroding pots and is only a small part of the total number which are rapidly being set into the stacks at this time. When our stacks are completely filled we will have used about 160,000 of these pots, and as each pot will contain about 25 lbs. of lead you can easily figure that we will have over 4,000,000 lbs. of lead in the stack when completely set up. While there is some breakage each time that these pots are used, still, it is quite small, and they are used over and over many times.

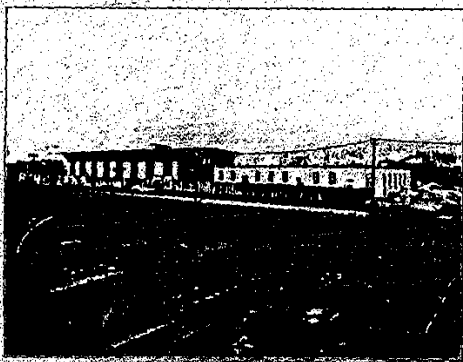
View No. 3 does not require any special mention, as it only shows a portion of the end of one side of the corroding building, and also shows 25,000 or 30,000 more of the corroding pots shown in view No. 2.



View taken in and about the new corroding building where we are corroding lead by the Old Dutch Process.

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Views No. 4 and No. 6 show the upper deck between the two rows of corroding stacks, and the reader will notice the rail yard for the hoists which lead to the decks below. There are three of these decks and their purpose will be better explained in connection with view No. 6. The upper deck is used only by the foreman or superintendent to enable him to readily direct the operations going on in various stacks on each side, and also to enable him to conveniently reach the top of each stack for the purpose of taking the temperatures. These two pictures show the two traveling cranes, which not only operate back and forth through the entire space shown, but which also are so arranged that they can be brought behind to travel over any individual stack. The work of these cranes is very important as it makes the handling of material both into and out of the stacks very economical. When the corroding building is completed, the buckle machine and a casting kettle will be placed in this building, and these cranes, leaving the corroding building and passing around the curve, will take the buckles from the mill building and deposit them in quantities of 3,000 lbs. at a time into any stack which we are filling. At the same time they will take the corroded buckles from the stack and deposit them conveniently in the repairing house of the mill building. With these cranes we will be able to put lead into the stack and also take it out as economically, if not more so, than any concern in the country in this line of business.



Corroding Building, on left, containing 16 stacks.

View No. 5 shows the interior of the stack, the tankbeds upon which the pots are set, some of the pots in position and filled with lead, and three of the decks which are used for moving empty pots. It also shows the crane in the operation of lowering a wheelbarrow of buckles down into the stack for use in filling these pots. One man is shown in the act of putting buckles into the pot, but this is not very clear. When the bed of bark shown is entirely covered with pots which are filled with lead, a layer of boards is placed over the top of it, and upon that layer of boards is placed another bed of tankbed, upon which comes another layer of pots, and so continuing until the entire stack is filled to the top with successive layers of bark, pots and lumber.

View No. 7 shows the casting kettle and buckle machine in its temporary location, and through the doorway can be seen a part of the large supply of pig lead, explained in description of view No. 1. This picture also shows the hoisting hook of one of the traveling cranes, ready to attach to a wheelbarrow loaded with buckles and ready to be taken into one of the stacks. The buckle machine is simply an endless chain of moulds, upon which we will cast approximately 75,000 to 80,000 buckles a day. You will also notice a pig of lead being fed into the kettle. Having purchased our pure pig lead, it is only necessary to melt it down and cast it into these buckles in order to put it into convenient shape for corroding.

View No. 8 was taken on one of the lower decks and shows how we store empty corroding pots. It also shows the railway leading to the deck above. The machinery which is shown is of no special moment, being only the temporary drive for the buckle machine. When each stack is gone, instead of going to the expense of taking all our corroding pots outside and filling them, they will be rapidly placed on one of these decks and stored there until the stack is reset, when they will be very handily packed back into the stack. The saving by this method will be considerable.

The above descriptions will enable our readers to follow the various operations used in the manufacture of our white lead with a greater degree of accuracy than could have been possible without the photographs.

We hope to show in the next CHAMELEON several reproductions of our packages, labels, and to tell how these goods will be put up for the trade. These matters have not yet been definitely decided upon and are being discussed at the present time.

The Little Paint Man Says.

I'm ready any time now to write those full page newspaper ads for our agents. I enclosed an order blank with the big Spring S W P, but if your agents haven't got it handy, tell 'em to just write me a letter and I'll write them the ad. But be dead sure to give me the right size. It must be either 7 columns wide, 6 columns wide or 5 columns wide.

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