

# Ecusta Has Large, Modern Water Department

## HUGE QUANTITY OF WATER USED MAKING PAPER

**Pumps Have A Capacity Of 28,000,000 Gallons Of Water Per Day**

BY STAFF WRITER

In the manufacture of cigarette paper, one of the most essential requirements is an abundant supply of fine, pure water.

This is one of the reasons why this site here at Pisgah Forest on the Davidson river was selected and that is why we have such a large, modern and complete water system.

The source of all water used at Ecusta is the Davidson river, the watershed of which lies entirely within Pisgah National Forest. The area of this watershed is 41 square miles. One inch of rain over this area is equivalent to 712 million gallons.

The water system of Ecusta consists of three pumping stations, each of which can pump up to 28,000,000 gallons per day. One of these is located at the river and pumps the raw water from there to the Filter Plant. Another is located at the Filter Plant and pumps the finished water to the reservoirs. The third is located at the reservoirs and pumps the water to the overhead storage tanks and to the mill.

### Large Filtration Plant

The eleven-bed Filtration Plant almost 400 feet in length, which has a cruising capacity of 20 million gallons per day and a maximum capacity of 25, is the largest in the Carolinas, and has a sufficient capacity to provide for an industrial town of 150,000 population. In order to give an idea of the size of this plant it may be added that the settling basins themselves, which are 15 feet deep, contain 5,000,000 gallons of water.

The plant is equipped with a complete water testing laboratory which contains the largest sampling table installed in any filter plant in the United States, from which samples can be drawn from eighteen different parts of the plant and mill.

It also contains a control board unique in filtration work. All pumps in the water system can be controlled directly from this

board either manually or automatically. The board contains nine temperature, flow and elevation recording meters, by which the filter plant operator controls the entire water system. It also contains a six-point pH indicator and recorder of which there are very few in the United States.

Approximately fifty tons of chemicals are used each month.

### Three Ground Reservoirs

A surplus supply of water is stored in ground reservoirs—one of 800,000 gallons capacity and two of 1,500,000 each. The two large reservoirs are circular in shape, 155 feet in diameter and the inside height from floor to top of dome 30 feet. When constructed, these reservoirs were the largest of their type ever attempted. Their construction is unique in that the floor and dome are only 2 inches in thickness.

In connection with the water system there are three elevated steel tanks. One of these, the wash water tank having a capacity of 150,000 gallons, is located at the Filter Plant. Another is located at the reservoir pumphouse.

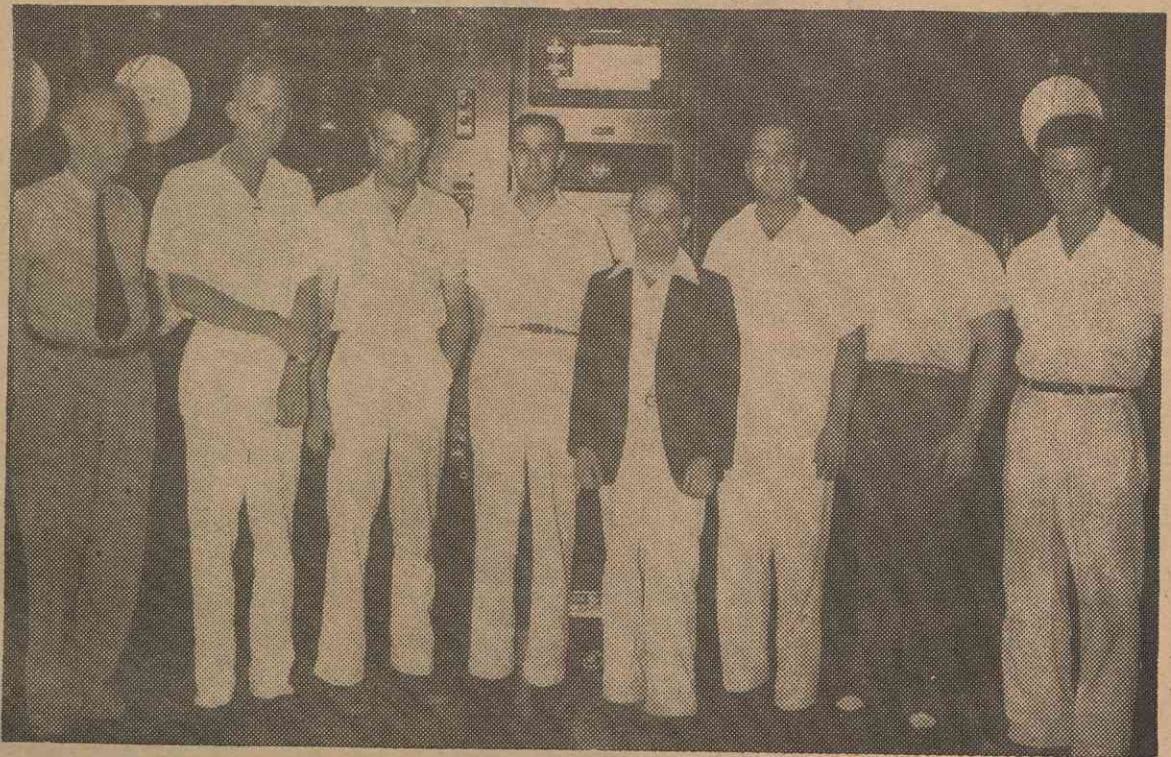
It has a capacity of 250,000 gallons and is known as the service water tank and is the tank through which the entire mill is furnished with water. The third tank is the white water tank located just south of the Laboratory Building. It is approximately 120 feet in height and has a capacity of 500,000 gallons. To give an idea of the size of this tank, the depth of the water in it is 30 feet, a sufficient depth to float a battleship. The diameter of the tank is 60 feet, the height 36 feet, and the walk around it is 200 feet. The little ball on top of the tank is 6 feet high. This tank is used for the storage of white water, which is recovered from the Machine Room.

### Mr. Finck In Charge

Herbert F. Finck is in charge of the water department. His staff includes the following: James H. Rhodes, James Winget, Ernest Burch, Harry Kolman, Fred Floyd, Fritz Waldrop, James Connell, Charles Aiken, William Kuykendall, Andrew Harrell and Hunley Mehaffey.

Needless to say, we are quite

## PERSONNEL OF THE FILTER PLANT



Shown above are members of the staff of the Filter Plant. Reading from left to right they are: H. F. Finck, James H. Rhodes, James Winget, Ernest Burch, Harry Kolman, Fred Floyd, Fritz Waldrop and James Connell. Other members of the staff who were unable to be present when the picture was taken include Charles Aiken, William Kuykendall, Andrew Harrell and Hunley Mehaffey.

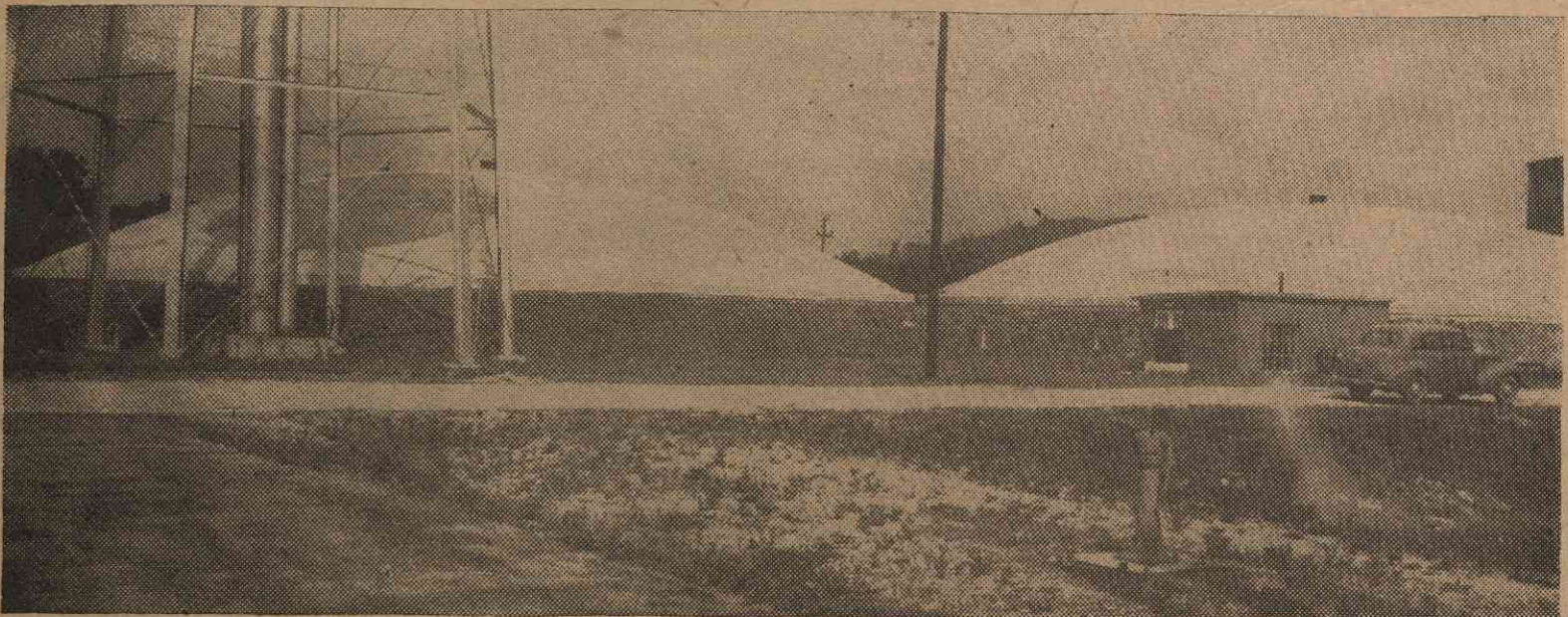
## HAS BEEN'S AND NEVER WILL BE'S ARE DEFEATED

The "has been's and never will be's," of the Office baseball team, played their second game against the Rosman something or others June 3rd. The Office team was defeated—7 to 4. On the whole it was a very good game all around. The "H.B.s & N.W.B.s" defense showed improvement but they fell down on the offense. They say they plan to make themselves very offensive to such luckless opponents as come their way. (They have a return engagement with the Brevard DeMolays.)

Starting were: "Buck" Best — first base; Dave Marder — short stop; Jim Brennan—second base; "Hank" Newbury covered the 'hot-spot'; Jim Curwin — short field; Bill Millner, Harold Schmidt and Harold Brown, outfield—Pete Eberle—umpire.

proud of our outstanding water department. The importance of water in making paper is another story that this paper hopes to carry sometime in the future.

## These Large Ground Water Tanks Each Hold 1,500,000 Gallons Of Water



Shown above are two unusual Ground water storage tanks. When they were constructed, they were the largest of their kind ever built. Their construction is unique in that the floor and the dome are only 2 inches in thickness. They hold huge quantities of water.