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## THE OHIO RIVER.

The great drought of the past summer has had a much more depressing effect upon Western river commerce than ever before known, especially along the Ohio, upon which stream there has been an almost total suspension of steamboat traffic. During about two months of every year the river generally dwindles down to a mere semblance of its usual self, and the large steamers lie up, while a smaller class of light draught vessels continue the business. During the present season, however, the river has been lower than for nearly fifty years, and even the customary low-water packets have been obliged to cease running, and the mails and passengers are carried by a few tiny craft, drawing from 12 to 18 inches with cargo aboard. On a larger portion of the Upper Ohio no attempt to navigate the river is made.

At Cincinnati there is but *two feet* of water in the channel, and the small boys wade across at the levee, which in a good stage of the river is a bustling scene of activity, with scores of steamers moored at its edge, and the unscrupulous urchins on the Covington shore now toss stones through the deserted doors of the great floating docks on the opposite side. Above the city, dozens of large steamers are lying idle, among them big 1,500 and 2,000 ton New Orleans packets—a striking contrast to the brook-like stream they barely float in. The novel sight of a steamboat whistling for an ox team to “clear the track”—an actual occurrence recently—a steamer’s crew in the yawl hunting for the deepest water, and other scenes along the river are depicted in our engraving, surrounding a view of the harbor at Cincinnati, sketched at the lowest period.

It is impossible for one at a distance to appreciate the effect of prolonged low water upon the vast region largely dependent on the Ohio River for all commercial activity. The river drains an area of more than two hundred thousand square miles, and from Pittsburg to its mouth is nearly a thousand miles in length. The numerous towns and cities on its banks, and to a large extent the interior country also, are supplied with coal and lumber from Penn-

sylvania; and to them low water means not merely diminished facilities for getting products to market, but a cutting off of fuel supplies and a general arrest of manufacturing industry, with a prospect of a fuel famine when winter sets in. To a large extent the Lower Mississippi region is supplied with coal floated down the Ohio in immense rafts of barges, and shares with the Ohio Valley the dearth of fuel incident to suspended navigation in the summer and fall.

It is not unusual for the water of the Ohio to become scanty during the summer, but a deficiency so great and so protracted as has been experienced this year, or anything like it, is happily rare.

For the first three hundred miles from Pittsburg the river is about 1,200 feet wide at high water, and at low water should be about 1,000 feet wide; with extreme low water this width is seriously infringed by sand bars. Below Cincinnati the width of the river increases until near its mouth it is 3,000 feet. The depth varies enormously, the range between high and low water being 60 feet or more. The usual range throughout the length of the river is 45 feet.

Our sketches are from the pencil of our artist contributor, Mr. H. L. Bridwell, and are drawn with much spirit. 1. A steamer hard aground. 2. Hunting the channel. The steamer’s yawl is sent out ahead to pole the deepest places. 3. A low water boat at full speed, water 24 inches deep. 4. View at Cincinnati, looking up the river from the Suspension Bridge. 5. Steamer whistling for ox team to get out of the way. 6. Scene on the Ohio at the usual stage of the water.

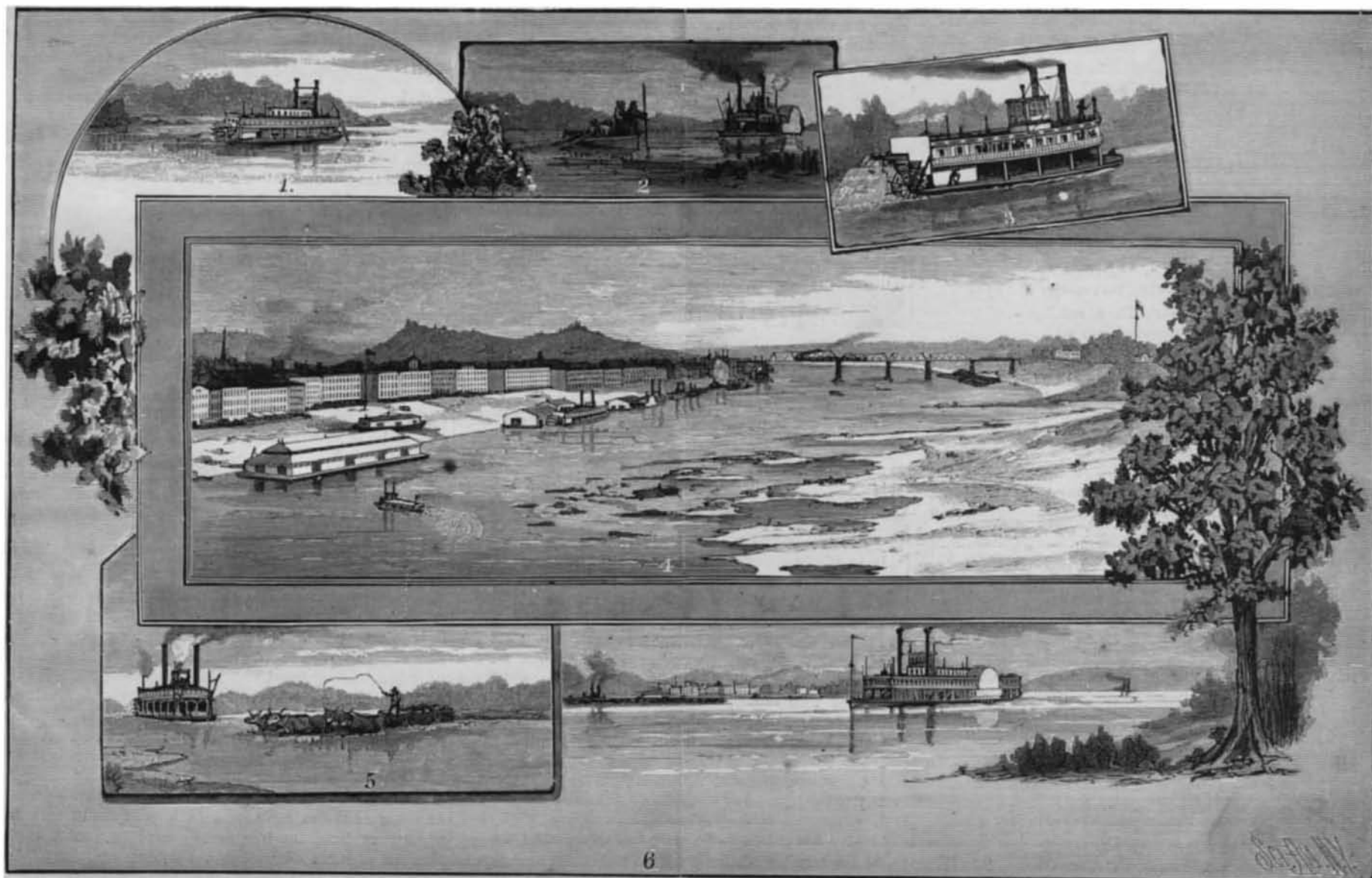
## The Poison of Human Saliva.

Recent observations by M. Gautier (communicated to the Paris Académie de Médecine) afford reason for believing that the poison of serpents differs from human saliva in the intensity of its effects rather than in essential nature, so that the fears with which a human bite is often regarded may not be wholly unreasonable. M. Gautier took some 20 grammes of human saliva, and, after lixiviating and purifying, obtained a substance which, injected in the form of

solution under the skin of a bird, had remarkable toxic effects. Almost immediately the bird was seized with trembling. It staggered and fell to the ground in a state of coma and complete stupor, terminated by death in half an hour or an hour, according to the dose injected and the vigor of the animal. The phenomena resembled fully those produced by the bite of a venomous serpent. The poisonous matter of the saliva is thought to be an alkaloid similar to the cadaveric poisons called *ptomaines*, which MM. Brouardel and Boutmy have isolated. Like them, it produces Prussian blue when mixed with ferrocyanide of potassium. The facts stated throw some light on the question of virulent maladies. The present case, it is pointed out, is not that of a true virus; for at high temperatures a virus is destroyed, but when the salivary alkaloid is heated to more than 100° its poisonous property is not affected. M. Gautier studied comparatively the poison of the cobra (one of the most formidable of Indian serpents). This injected, in a dose of one milligramme in a quarter of a cubic centimeter of water, under the skin of a small bird, such as a chaffinch or a sparrow, kills it in five to twelve minutes. One observes torpor and coma, then a period of excitation, with convulsions and tetanic contraction. In connection with the subject, a correspondent of *La Nature* calls attention to a passage of Rabelais in which the poisonous nature of human saliva is recognized.

## Postal Statistics.

The annual report of the Superintendent of the Free Delivery Division of the Post Office Department for the year ended June 30, shows that during the year there were delivered 262,425,668 mail letters, 59,968,559 mail postal cards, 76,733,208 local letters, 43,898,158 local postal cards, 2,126,309 registered letters, and 146,417,114 newspapers. There was collected at the 109 free delivery offices during the year 284,759,945 letters, 85,793,125 postal cards, and 54,075,476 newspapers. The cost of the service for the year amounted to \$2,493,972.14, or 3 mills per piece.



1. Hard aground.—2. Hunting the channel.—3. The low-water boat.—4. The Ohio at Cincinnati, looking up the river from Suspension Bridge.—5. Steamer whistling for oxen to clear the channel. 6. Scenes on the Ohio at the usual stage of water.

LOW WATER SCENES ALONG THE OHIO RIVER.—DRAWN BY H. L. BRIDWELL.