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FLOOD DAMAGE TO OHIO AND INDIANA DRUGGISTS.

DURING the month of March much of the territory of central and southern Ohio, and an extensive section of Indiana, were swept by the most disastrous floods in the history of these sections.

The inhabitants of these regions had so long escaped disasters of this kind that they had come to regard their sections as safe against the destructive storms and floods which from time to time had visited other states, but the record of March proves this sense of security to have been ill founded.

The section of Ohio mainly affected is a moderately elevated plateau, and seemed to be especially well situated to escape extensive damage from floods. The streams are numerous, and are ordinarily well behaved, carrying off the waters of the annual spring freshets with no greater expansion than could be accommodated by the ample "bottoms" which form their ordinary flood grounds. These, however, proved entirely inadequate to carry the flood of water suddenly poured into them. Following an unprecedented rainfall, valleys two to four miles wide, which apparently had not been filled with water since the melting of the ancient glaciers, became within a few hours rivers of rushing waters, lifting houses and barns from their foundations and hurling them against bridges of steel and concrete, which crumpled up like rotten wood under the impact, while railway embankments that had stood for half a century dissolved and disappeared like snow drifts.

Towns and districts located high above the level of recorded floods were inundated. The lighter and less substantial buildings were twisted from their

foundations and hurled against the more substantial buildings of brick and cement, until these, too, gave way, leaving on recession of the flood a tangled mass of wreckage, consisting of broken timbers, pianos, automobiles, railroad freight cars, household goods, stocks of vegetable stalls and dry goods stores, and the bodies of human victims, horses and cattle, thickly covered with mud. In some places whole rows of well built cottage homes were completely swept away, leaving their sites a series of irregular depressions like an emptied river bed. In some places the soil of fertile fields was carried away, down to the untillable clay beneath, while in other places it was left covered by a thick layer of coarse gravel and river boulders.

During approximately thirty-six hours the rainfall amounted to one-third, or more, of the annual average precipitation. The cleared hills and their slopes permitted the water to run off almost as fast as it fell, and the well drained fields of the lower grounds carried the water directly to the small streams into which they emptied. The sewer systems of the villages and towns likewise hurried the waters which they collected into the creeks and rivers, the consequence being that the bulk of the rainfall reached the streams within a few hours after its precipitation, whereas a hundred years ago it would have been largely absorbed by the soil upon which it fell, and would have escaped by slow seepage, distributed over weeks and months.

The alleged narrowing of the river channels by the dumping of waste into them, which has been given as one of the causes of the damage, in reality played but a minor part. A more important factor, perhaps, was the frequent narrowing of the river channels by the approaches and abutments of railroad and other bridges. The part played by both of these, however, was insignificant. Even if the channels had been of their original width at all points they could not have carried off the enormous volume of water that was poured into them in the short space of time, and it is not easy to imagine any system of impounding basins or of levees that would have been sufficient to have restrained the floods from destructive results.

It has been estimated by competent hydrographic authorities that a basin of not less than eighteen hundred square miles in area and twenty-five feet deep would have been required to contain the total precipitation, a work that would seem to be almost beyond the range of possibility.

That the loss of life was at first overestimated was due mainly to the breaking of all lines of communication between inhabited centers. When it was perceived that villages and resident districts were largely under water, or the buildings swept away, and their inhabitants could not be heard from it was assumed that they had perished. The loss of life, however, was far too great, even though much less than at first reported. The property loss will never be correctly estimated. In portions of some communities the accumulations of half a century have been entirely swept away.

A prominent jobber in central Ohio estimates the number of retail druggists who were more or less injured by the floods at two hundred, of which about one hundred and twenty-five had their stocks and stores, and sometimes their homes, either very greatly damaged, or practically destroyed. As soon as communications were reopened and the extent of the damage became known, offers of as-

sistance to the damaged druggists were abundant. Manufacturing houses very largely sent notice of their intention to replace the damaged or destroyed stocks with new material; jobbers gave notice of their intention to extend the period of credit, and to aid in other ways, while various Pharmaceutical Associations began the collection of funds to be loaned to druggists in the injured districts to enable them to resume business. It is stated that the druggists of San Francisco and vicinity, remembering the manner in which the druggists of the East came to their aid following the great San Francisco fire, have contributed something like fifty thousand dollars to be loaned to the flood-damaged druggists.

Most of the railways affected have been able to resume traffic over temporary bridges and trestle-work, though with some the damage was so extensive that considerable stretches of their lines are still out of commission. The business houses in most cases have already reopened with new stock of goods, or are preparing to do so at an early date. Everywhere in the damaged districts the people are bearing their misfortunes bravely, and are starting in to restore their ruined homes and fortunes. In this work all will wish them success, and many will be glad to assist.

J. H. BEAL.