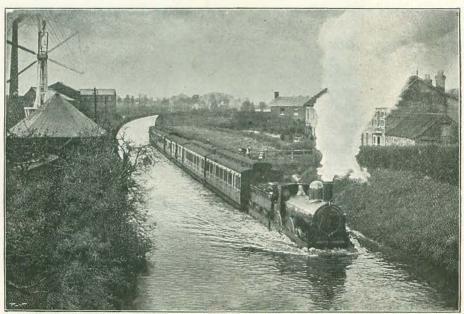
Floods.

By JEREMY BROOME.



I.—GREAT WESTERN LOCOMOTIVE RUNNING THROUGH THE FLOOD AT CREECH, NEAR TAUNTON, NOVEMBER 14, 1894.
From a Photo by A. G. Petherick, Taunton.



F Noah (who knew a thing or two about floods) could have seen this Great Western locomotive pushing and splashing its elephantine way through the floods at Creech, near

Taunton, on November 14th, 1894, he would have been struck dumb with surprise. Yet there is nothing wonderful in it. Trains

must reach their destination somehow, and if it happens that some unruly river, like a small boy outgrowing his clothes, swells with pride and rains, and overflows the road-bed of a great corporation, there is nothing to be done except to go through. As long as the road - bed is uninjured, and the water does not touch the boiler or the passengers' feet, the trip is easily accomplished.

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But when a river rises from its bed and tears down through forests for several miles, sweeping everything before it, things are different. Our second photograph, the first of the four kindly lent to us by Mr. Harrison Hodgson, the general manager of the Costa Rica Railway Company, shows one remarkable result of these mountain torrents. The solid masonry of the line



2,--PART OF THE RAILWAY IN JAMAICA UNDERMINED BY FLOODS.

From a Photo, lent by the Costa Rica Railway Co.

in Jamaica was swept away by the onrushing water, leaving the rails and sleepers hanging in a graceful loop along the base of the hill. Nothing, perhaps, could better show the excellent construction of the line, but it is a costly way of illustrating good workmanship. In Costa Rica the same dangers are met with, and the accidents cause great expense. "Our embankments," writes Mr. George Earl Church, in an 1895 report to the

directors of the Costa Rica Railway, "across the wide valley of the Matina River, act as a dam when it overflows, as it did at the end of last June. The river then rose from its bed and came tearing down through the forest for a width of several miles, sweeping our railway before it as if it were a plaything." Oftentimes the effect was picturesque, as when the floods, rushing by the low-roofed houses, dropped in glistening waterfalls over the jagged rocks (3).

The force of these Costa Rica floods is sometimes so great that whole trains are smashed into fragments. The train shown in (4) was proceeding slowly across an iron bridge, when the trestle was swept away in an



4.—TRAIN AND BRIDGE DEMOLISHED BY FLOODS ON THE COSTA RICA RAILWAY. From a Photograph.

instant, leaving the locomotive and cars in a broken heap at the bottom of the stream. It took many hours of hard work to clear away the *débris* created in almost the twinkling of an eye. Sometimes, in fact, it takes a fortnight to get a train through, for not only have new bridges to be built, but the whole line has to be strengthened in those parts torn and weakened by the floods. In many cases sections of the line have to be abandoned. The rivers change their beds, and this necessitates new bridges in new places. "In flood time," adds the report, "the pounding, smashing, and grating of the veritable bombardment of boulders can be heard for two miles."

And when the flood has run its course. little can be seen in places except "the wreck of intransitable bridges. masonry, and railway track." Fortunately, however, these floods in Costa Rica occur rarely, and such a sight as is pictured in (5) is exceptional. A flood, in these days, must be of mighty power to shatter the works of modern engineers.



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3.-A FLOOD IN COSTA RICA.

[Photograph.



-REPAIRING DAMAGE BY FLOOD ON THE COSTA RICA RAILWAY. From a Photograph.

An unusual quantity of water around Venice ought to excite no more remark than tons of coal about Newcastle, or tin in Cornwall. But when this water begins to flow into the cellars of the houses, and

cover the public squares, there is no little conversational hubbub. Twice in the autumn of 1896 was the Queen City of the Adriatic invaded by the floods, and our photograph (6) shows the Piazza di San Marco. with the noted Campanile, or bell-tower of St. Mark's Church, on the right, carpeted with water. At night the effect was beautiful. The Doge's Palace, the massive Campanile, and the church itself were mir-

rored in the smooth water of the square, and "the level field of chequered stones," which Ruskin wrote about, became the pleasure ground of twinkling gondolas.

In November, 1894, Father Thames



6.-FLOOD IN ST. MARK'S SQUARE AT VENICE, 1896.

[Photograph.



OXFORD ROAD, ETON, DURING THE THAMES FLOODS OF NOVEMBER, 1894.
 From a Photo. lent by G. J. Symons, Esq.

outdid himself, and his wayward actions were imitated by nearly every river in Great Britain. He rose four inches higher than he did in the noted Wellington flood of 1852, until nearly every house along his banks from Gravesend to Oxford felt the destructive strength of his mighty body.

At Eton, the tradesmen had to deliver their goods in boats, the streets were lined with planks, as shown in (7), and the Eton boys got their holiday. The distress here was considerable, and the good Queen visited nearly every flooded part in the neighbourhood, carrying succour to the poor. Her cooks made soup for the hungry, and her money helped those whose income had been cut off by loss of work. East Molesey, the river rose above the

lock gates, and the road to the station (8) was filled with boats and men in bare legs. Boys had to ride on the roofs of the vans, fowls were to be seen in the living-rooms of the houses, and in one case, as was written at the time, "two pigs were included in the family circle," one of



CREECH ROAD, EAST MOLESEY, ON NOVEMBER 17, 1894.
 From a Photo, by H. W. Newton, East Molessy.

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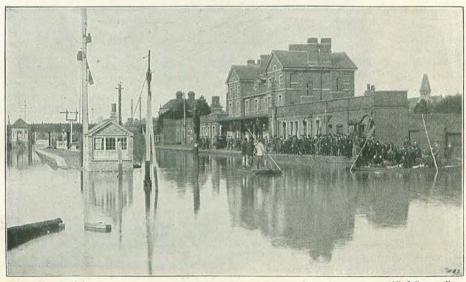
DATCHET GREEN, DURING THE THAMES FLOODS OF NOVEMBER, 1894.
 From a Photo. lent by G. J. Symons, Esq.

which jumped from a bedroom window, happily to be rescued from a watery grave.

During a Thames flood, some of the towns become Venices in miniature, with punts for gondolas. Datchet Green (9) made a pretty picture with its quaint abutting houses rising from the water. Here the flood was unusually deep, and traffic was almost entirely carried on by means of boats. At Hereford (10), where the Wye ambitiously lifted its head above the banks, the railway was submerged, and crowds of people were compelled to remain on the station platform until boats could take them off. People took their dinners and picnicked

on the floods, as if it were summer-time, and the man on the street, metaphorically speaking, became his own boatman, and quickly developed muscle, of which Britain is ever proud.

In times of general flood, Cornwall suffers tremendously, and the photos. which we reproduce on the two following pages, show the great extent to which the bursting rivers play havoc with property. A large part of the damage is traceable to the flooded and deserted mines, which are to be found in all parts of the country. At St. Ives, not only were houses destroyed (11) and people made temporarily homeless, but the streets were



From a Photo. lent by

10.-HEREFORD STATION, NOVEMBER, 1894.

[G. J. Symons, Esq.



II.—HOUSE AT ST. IVES, DEMOLISHED BY FLOODS.

From a Photo. by J. C. Burrow, Camborne.

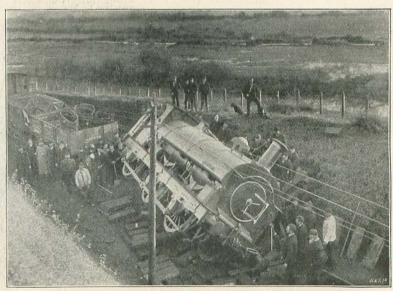
torn up, and gas-pipes and water-mains laid bare, at great expense to benevolent

corporations in that district. (11) and again in (14) we see these pipes in their unaccustomed nakedness, and several people who desired to be photographed. And here I may add that it is not every town that likes to have its damages by flood photographed and illustrated to the public. I had written to a West of England town for some excellent photographs of the 94 floods in that district, and received the following answer: "I beg to say that I should be glad to send you some flood views, but the idea was pretty general here at the time, that the publication of said views had been detrimental to the welfare of our city, and I was in bad odour in certain quarters in consequence." A righteous and brave city, forsooth, and full of wisdom!

But let us return to the Cornwall photographs, which are among the best of their kind ever taken, and can do pretty St. Ives little harm. Near Marazion a culvert burst, and upset a large locomotive, as shown in (12). Luckily, the locomotive was attached to a goods train, or great damage would have been done to life. Ives furniture floated about the streets, and swimming cattle buffeted against the ruins of the houses. In one instance a house was completely washed down (13), and its place was taken by a rushing torrent, over which strong boards had to be placed for the use of the neighbouring householders.

These photographs show but a tithe of the damage which floods

can do when once they set to work. It is when lives are lost by hundreds and



12.—LOCOMOTIVE OVERTHROWN BY FLOOD NEAR MARAZION, CORNWALL.

From a Photo. by J. C. Burrow, Camborne.

FLOODS.

thousands, and whole cities are wrecked by what the newspapers call "incredible inundations" and "devastating deluges," that things come to their worst. From early times these deluges have taken place, and, indeed, nearly every race of men on the globe has a tradition of a great deluge, such as the Noachian Flood of the Christian peoples. In 1642, to go no further back, the great Hoang-Ho swallowed up 300,000 people at Kaifong, in China. Four years later, 110,000 Frieslanders were drowned in Holland; and in 1824, the Neva overflowed at St. Petersburg with the loss of 10,000 lives. A few years ago an enormous dam broke at Johnstown, Pennsylvania, and a volume of water, three miles long, a mile wide, and a hundred feet deep, burst upon the surrounding country into the valley below, destroying everything in its course for eighteen miles, and killing over 5,000 people.

It may be interesting to note here that floods are of two kinds, caused by differences in the nature of the countries through which rivers flow. Rapidly flowing rivers,

with a rapid fall, rise quickly after heavy rains, which cause a high but rapidly subsid-



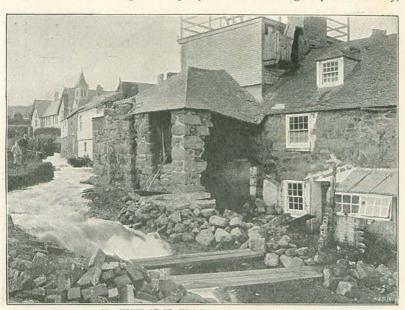
14.—A STREET AT ST. IVES TORN UP BY FLOODS. From a Photo. by J. C. Burrow, Camborne.

ing flood. On the other hand, rivers that flow gently rise slowly, and never reach

the height of torrential rivers, as they are called. Their floods, however, fall slowly, and linger on the land. For this reason, among others, the long and lower floods are the more injurious.

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River - floods, as people along the Thames know, are the product of rainfall. They rarely result from a great down-pour at one time, but from a series of moderate rainstorms, which



HOUSE AT ST. IVES WASHED DOWN BY FLOODS.
 From a Photo. by J. C. Burrow, Camborne.



15.--FLOODED FLOOR IN MILSTON CHURCH, NEAR AMESBURY.
From a Photo. lent by G. J. Symons, Esq.

gradually fill the river channels. Consequently, when rain has been frequent, the floods are looked for, and, when necessity demands, provision is made against disastrous

effects. Often, of course, the effect is beneficial. The Nile owes its supplies wholly to the copious rains of countries the wherein it rises, and during the flood a great portion of the Delta and of the Valley of Egypt is inundated. Yet the Egyptians could not do without their great river. It is the fertilizer of the country. The alluvium, or deposits of earth, sand, gravel, and decayed matter, with which it is charged, spreads over the land and makes it rich and fruitful. The Thames floods, too, may be useful as fertilizers, but their chief effect is to dampen people's cellars, drown cows, obstruct the business man on his way to the station, raise hopes, often rudely thwarted, in the breast of the average. Eton boy, and put pennies in the pockets of men with punts.

Some floods are religiously inclined, and go to church. As witness thereof, mark the accompanying reproduction (15), showing the floor of Milston Church, near Amesbury, in Wilts. The reflection of the choir-window in the water is beautiful, and the effect produced by this reflection in conjunction with the pews and the stone floor near the altar is curiously shown upon turning the illustration upside down.

The recent floods in the Thames have again drawn attention to that fickle stream. They were not so extensive or disastrous as those of 1894, but were quite heavy enough to cause anxiety and a supply of new stories. A Maidenhead auc-

tioneer, it is reported, held a sale of land, and wielded his hammer from the top of a tub in the midst of the floods. Purchasers punted to the sale, and money



BAKER DELIVERING BREAD AT MAIDENHEAD, FEBRUARY 10, 1897.
 From a Photo. by George Newnes, Limited.



PUNTING FOR BEER AT MAIDENHEAD, FEBRUARY 10, 1897.
 From a Photo. by George Newnes, Limited.

was so plentiful that all the land was sold, even though it rested at the bottom of the floods. At Windsor a jovial house-agent advertised a magnificent property as "including in summer a beautiful lake at the bottom of the garden, and in winter a beautiful garden at the bottom of the lake." At Clewer and Bray the poultry took to the trees, and

at Eton, bacon and eggs were delivered through the bedroom windows by means of ladders. At Maidenhead the baker tossed his bread from the vehicle into the housemaid's arms, not being able to get out of his cart (16).

The scenes at Maidenhead were, in fact, typical flood-scenes. The long country lanes near the river were sheets of water, through which the tradesman's van and my lady's carriage swished Vol. xiii.—57.

along with water to the hubs. Many of the houses were deep in the water, and high fences here and there peepedabove the surface. One of the publichouses was surrounded by the flood, but this did not in the least interfere with trade. The populace made use of the punts provided free (but probably not for this purpose) by the Corporation, and paddling up. jug in hand (17), received the beverage with outstretched hands. In another place

men were to be seen walking along in rubber suits, with the water almost waist-high. Ladies were making calls in boats, and on Sunday the religious section of the population punted to the church door, and punted home again. The postman delivered his letters from a cart by means of a long stick (18), which he held at arm's length to the maid.



POSTMAN DELIVERING LETTERS AT MAIDENHEAD, FEBRUARY 10, 1897.
 From a Photo. by George Newnes, Limited.