

WATER FOR NORWICH.

SIR.—I submit for consideration the following suggestions for obtaining an ample supply of rain-water for Norwich.

We have a street in this town at one end of which (though there are obstructions at present in the way) is placed the beautiful "Norman keep" of our castle. The inhabitants of this street draw their supply of drinking water from a well, I think, from 120 to 130 feet deep. One side of this street commands the most beautiful prospect in Norfolk, perhaps in England, now shut out by buildings of the most wretched character and description, although it is the direct road to the west part of our environs. Along the street fountains would not only be of great public utility, but might be made, by the aid of architectural genius, sources of infinite pleasure.

I lived, during a period of three years, in a warm climate, and occupied a house in which there were never less than ten persons, and frequently during summer upwards of twenty for weeks together; and although there was a well within a few feet of the door we preferred making use of the rain-water, preserved in a sunk stone tank, during every part of the year, and for all purposes, notwithstanding droughts of six weeks and two months' duration. I cannot hesitate to believe that in this country quantity will not be the objection. There we had wood roofs, and wood supplied our fires, consequently the water which fell from them required no previous preparations; here coal fires give us the trouble to purify the draught.

Norwich.

W. T.

Rain-water fountains, provided with filters, are inexpensive in their first formation, and are maintained at small cost in full efficiency for many years. They possess, also, the following advantages, viz. :—

- 1st. A certain supply of really pure water throughout the year, at the rate of ten gallons per diem for each square yard of surface led into them.
- 2nd. They are accessible in the depth of winter as in the height of summer, for they cannot freeze.
- 3rd. They yield not only the purest water to drink, but that which is indispensable for all household purposes.
- 4th. The streets may be conveniently watered with their aid.
- 5th. They are certain resources in cases of fire; and instantaneously applicable by the most simple means, which a child may comprehend and make use of.
- 6th. Water, the grand requisite for sanitary purposes, is by this means obtained abundantly and cheap.

It appears by the Norfolk Rain-Gauge Register that one acre of land receives during the year 13,923 hogsheds: this quantity will give to each square yard of roof (within a fraction) 150 gallons. A cottage, therefore, with a roof of no more than 25 square yards, will give ten gallons and two pints per diem to its occupants throughout the year.

The tanks will be circular and sunk into the earth, built with brick, laid with Roman cement, and faced with the same, and sufficiently deep to contain an iron frame in four parts surrounding a centre man-hole, in which (for cottage supply) a pump will be fixed for common use. Upon these iron frames the following materials should be placed :—

- 1st. A stratum of oyster-shells, 3 inches deep.
- 2nd. A ditto of charcoal, same thickness.
- 3rd. A ditto of fine sand, ditto.
- 4th. A ditto of shingle, ditto.

These will form a sufficient filter, and (I think) render the water pure and clear as crystal. The landlords of cottage property to be instructed to lead their down pipes into these receptacles, through such tubes as might be recommended. When the tanks are made use of for street and ornamental purposes, a force-pump (having an India-rubber hose tubing) might be fixed—and this tubing may be of any desired length—and would be used to water the streets, supply reservoirs in all the surrounding houses, and also to extinguish fires.

BLIND BUILDERS.

We have but one object in giving the lists of ill-considered tenders which occasionally appear in our pages under this head, and that is, the advantage of builders. We did not adopt the course without due consideration, and we are satisfied the determination we came to is the right one, and will effect good.

Amongst correspondents on this subject, "An Architect" thinks we may be sometimes unjust to the lowest in the application of the term, which may rather apply to the highest. We do not pretend to say which is in error,—but that one is so when such differences exist as those we have had occasion to chronicle, is undeniable.

When, taking two instances from a pile now before us, we find the highest tender for a new shop front in Islington 350*l.*, and the lowest 195*l.*, and thirteen tenders for certain work in the London Mechanics' Institution ranging from 114*l.* down to 33*l.*, the justice of the epithet, and the necessity for some proceeding to make builders think upon the subject, must be evident.

One leading builder, in a letter containing an assertion which is necessarily wholly groundless, and as it seems to us somewhat impertinent (namely, that we "have upon this subject, no correspondent of high standing in the building business"), threatens us with legal proceedings if his name should again appear in our paper under such circumstances. We have no desire to annoy, still less to injure, say one, but no foolish and idle threat of this sort will prevent us from continuing in a course which we consider for the general good, so long as such tenders as the following, for example, are made.*

Tenders delivered for sundry alterations to a house at the corner of Whitefriars-street and Primrose-hill. Mr. Malpas, architect.

Wormley	£1,134
Park	959
Bagg	910
Lyons	903
Darby	800
Netting	780
Simmons	760
Joseph Greenwood	705
Dean	695
Pilbee	687
Watson	670
James Greenwood	660
James Judd	647
Collins	637
Cox and Hart	595
Howlett and Collett	528

HEALTH OF TOWNS ACT IN DOVER.
COMMISSION OF ENQUIRY.

MR. R. RAWLINSON, one of the inspectors appointed by the General Board of Health, opened a court of inquiry at Dover, on Monday, the 4th inst., which continued for several days. A great number of witnesses were examined, most of them voluntarily, and our informants say abundant testimony was produced of the necessity for the introduction of far greater powers than any local Acts now give the governing bodies in this town. Of the defective supply and bad quality of the water, the evidence was complete; no established rule of charge appears to have been adopted by either of the two companies who have partitioned the town; and there are many parts where the mains are not introduced. Gas is supplied to the public at 7*s.* 6*d.* per 1,000 feet; the street lamps are charged 3*l.* 3*s.* per annum for barwings, consuming 5 feet per hour, and 3*s.* for three jets, burning 3 feet per hour, the Company furnishing mains and lamps. Of the general salubrity of the town, and the healthy state of the inhabitants, the medical witnesses gave satisfactory reports. The commissioner, attended by Dr. Souby, Mr. Huntly, architect and surveyor, and the surveyor to the Paving Board, made a personal inspection of most of the localities, many of the poorer districts presenting a scene of the most disgusting filth. The sources of the river Dour were next visited; but the immense amount of mill property situated on the stream, and which must be compensated if any deprivation of water at the head

* This list has been forwarded to us by seven different parties.

took place to any extent, such as that for the supply of a large town of 20,000 people, is thought to render it necessary to abandon all idea of accomplishing it in this manner. The oft-repeated answer which was given by the poor cottagers, that "we do not live in this condition from choice," is convincing that if you give them the means they will be clean.

RAILWAY JOTTINGS.

NOTICES have been lodged of application to Parliament for its sanction to upwards of twenty amalgamations in England, and eight in Scotland. The number of plans and sections lodged in connection with railways down to the last day for their reception was twenty-nine, two only being for new lines.—A commission of practical engineers and scientific men has been recently appointed at the recommendation of the Railway Commissioners, to investigate the propriety of employing iron, and particularly cast-iron, in railway works.—The reduction in price of coal at Bury St. Edmunds, since the opening of the Eastern Union, has been equal to the amount of poor-rates levied in the town.—Notwithstanding the use of powder magazines with trains, and the prohibition of other modes of conveying gunpowder and other combustibles, so much carelessness in the disposal of dangerous materials such as these, and that by the railway officials themselves, has been occasionally evinced, that complaints and warnings have repeatedly been given by prudent persons to more than one of the principal companies. Prohibiting other modes of transit, and taking special charge themselves of such materials, it certainly is incumbent on them to carry out the most stringent regulations for their safe disposal at every stage of their transit. Nevertheless, an accident has just occurred on the Eastern Counties lines which perilled the lives of numerous parties whose escape was all but miraculous. Nearly two cwt. of powder in two separate barrels, on being taken out of a train magazine at Witham, in place of being warily and at once disposed of in a place of safety, were carelessly put down in the very way of a mail train, which ran right over them, the engine crushing them to pieces, while the sparks from the grating in a moment exploded the whole, throwing the engine upwards and sidelong off the rails, tearing up the permanent way, smashing several of the carriages, and arresting the train with a sudden shock. Had the sparks taken even a single second longer to reach the powder, the explosion, instead of taking place beneath the ponderous and relative engine, must have slain every soul in the carriages behind it. Railway recklessness meets amazingly often with "the devil's own luck;" it is, indeed, amazing, how the merest and most critical chance so often tempers such fatalities with merciful interposition. We would not advise railway officials to trust too much or too long to such chances, however.—We confess we have a spice enough of uncharitableness in us to rejoice at the continued failure of the return-ticket suspension on the different lines of railway. Taking the three last weeks before the eventual 1st of November, the gross passenger receipts on the Great Western were 45,572*l.* 15*s.* 2*d.* for the three weeks. The passenger receipts for the three weeks after the 1st November were 37,282*l.* 6*s.*; showing a falling-off in the passenger traffic alone in these three weeks of 8,290*l.* 9*s.* 2*d.* and this, too, with 15½ miles of additional line brought into productive operation. The whole of this diminution is on the passenger traffic alone, the goods traffic continuing nearly stationary. Again, the Midland Company's traffic for the week before the 1st of November was 21,446*l.*; for the week after November 1st, it was 20,822*l.*; showing a falling-off of 624*l.* For the three weeks before November 1st, the traffic was 67,692*l.*; for the three after November 1st, it was 60,313*l.*; showing a falling-off, on the three weeks, of 7,379*l.* Thus it is clear that the railways will get less money out of the increased cost of travelling, and "the public," as the Gloucester Journal remarks, "may now, we think, confidently reckon on a return to the system which worked well—not only for the public, but for the companies themselves." Yet such stupid and obvious miscalcu-