

To the Editor of the Whitehaven Gazette.

Sir,—From what appeared in your paper, some months since, I was led to expect that the time was not far distant when Whitehaven would participate in the advantages which other towns have derived from being lighted with Gas; but, from some cause or other with which I am unacquainted, I fear there is little prospect of seeing so desirable an object carried into effect. I beg, therefore, to call the attention of the public to a subject of equal, if not superior, importance, I mean that of supplying the Town with good WATER, in a more convenient way than any that has hitherto been adopted. Should it be found impracticable to raise sufficient funds to light the Town with Gas, I doubt not but the gentlemen who laudably endeavoured to do so, will use the same exertions to supply it with Water; and as the latter plan might be accomplished at much less expense, and is free from the objections which have been urged against the former, I hope it will meet with general approbation and support.

In the year 1808, the Earl of Lonsdale, wishing to have the Town of Whitehaven properly supplied with Water, gave the necessary directions for measuring all the Springs in the neighbourhood, in order that so desirable an object might be carried into effect.

The undermentioned Springs, in the driest periods of the year, were found to yield the following quantities of Water:—

Stanley Spring.....	Gals. per Min.
High House.....	46
Moreby Trough Spring.....	54
Adamgill Head.....	12
First Pump on the New Road, near George Pit Level..	10
Second Pump, do. do.....	5
First Two Troughs near Bransly House.....	1
Horse Trough on New Road.....	2
	—40

Of these Springs that at Stanley is the largest: it yields 66,240 Gallons in the 24 hours; and supposing the Town to contain 16,000 inhabitants, it will yield equal to 4 Gallons per day for each individual. This quantity would be nearly sufficient: in Edinburgh the estimated quantity for each inhabitant is 5½ Gallons in the 24 hours.

The level of the Stanley Spring strikes the surface of the ground near Partes Pit, and is 25 feet below the ground in crossing the road between Green Bank and Mire House, and the level is again above ground at the foot bridge over the Poe, on the North side of Mire House, and continues so all the way to the Town, near the Poe, where it is 16 feet above the ground. The distance of the Spring from Partes Pit is about a quarter of a mile; from Partes Pit to the foot bridge, three quarters of a mile, and from the bridge to the town is two miles: total distance three miles.

It is supposed that the Spring rises further up the hill side, and is conducted down to where it shows itself. If, therefore, it could be obtained 25 feet higher, it may be brought in a conduit above the level of the hill, between Partes Pit and the bridge over the Poe, to the Town, near the Poe, where Reservoirs may be made to collect the water day and night. From these Reservoirs it may be raised by a 15 horse engine, into another Reservoir on a level with the highest part of the Town (about 16 fathoms.) Out of this pond the water may be carried in iron pipes to the Town. But if the Spring does not rise higher up in the hill than where it is at present seen, the steam engine may be placed at the Spring, and force the water to the proper height at once, whence it can run in a conduit on the high ground, to the last mentioned Reservoir.

If the Stanley Spring should prove inadequate to the supply of the whole Town, then Adamgill-head Spring may be brought in a conduit to supply that part of the Town near St. James's Church, and in this case the feed from Stanley need not be raised so high. If however, no other feed than that from Stanley should be deemed necessary, the pipes need be laid only as far up the hill as George-street, where the inhabitants of Peter-street and High-street might procure Water at the public conveniences. The inhabitants of Rosemary Lane and Mount Pleasant might also procure Water in Albion-street, the Market Place, and Quay-street.

There are two modes of supplying the Town with Water; the first (which is an expensive plan) is to have pipes in every street, and from these branch pipes into every house. The second plan (which is much more economical) is to have pipes laid only in certain streets, and branch pipes carried thence to proper places—and at such distances as that none of the inhabitants shall have more than 100 yards to travel for water. This latter plan would cost one half less for pipes than the former.

An Estimate of the probable Expense of Supplying the Town of Whitehaven with Water.

The distance from the vicinity, or head of Scotch-street, (which is above the level of every other part of the Town, situated upon the side of a declivity, being not less than 70 or 80 feet perpendicular above the plain or principal part of the said Town) to the 3 Springs or Water Pumps, named Level, Aikbank, and Bristow Bank Pumps, computed to be about 1620 yards, and supposing this distance to be laid with Cast Iron Pipes, of about 5½ inches diameter within, would cost

About 12s. per running Yard, or	972 0 0
1620 Yards at 12s. ....	202 10 0
To cut the Ground and lay the Pipes 1620 Yards at about 2s. 6d.	300 0 0
To make a Reservoir at the head of Scotch-street about.....	£1474 10 0

It is presumed such Springs would afford a sufficient supply.

Supposing Pipes to be laid through the different streets and lanes in the Town of Whitehaven it would be equal to a distance of about 7,500 yards.

And allowing 12s. per running Yard would cost.....	4500 0 0
Cutting Ground and laying Pipes at 2s. 6d. per Yard.....	937 10 0
Fountains and Cocks in the Town about.....	500 0 0
	£5737 10 0

Should the supply of Water from those Springs prove inadequate, by continuing the line of Pipes to the further named Springs of Lamb Head and Adam Gill, a distance of about 1100 yards, it would cost for

1100 Yards of Pipes at 12s. per Yard.....	660 0 0
Laying 1100 Yards of Pipes at 2s. 6d. per Yard.....	137 10 0
	£797 10 0

Probable Expense of the whole..... £8009 10 0

I remain, Sir, yours, &c. A. B.

Whitehaven, May 17, 1822.

