During the first few weeks of their incubation many imperfect and dead eggs are found, and for the purpose of removing them from the good ones the screens upon which they lie are removed from the hatching-boxes to the shallow trough of running water, and picked out in the usual way with forceps, as shown by the figures in the illustration.

This invention has been pronounced by many of the most scientific and practical fish-breeders in the United States to be the most practical and successful mode of propagating fish of any kind in the world, as has been demonstrated during the past year at Clarkston, where the patentee resides.

In proof of these assertions, and to show the practical results which have been achieved during the first year of its trial, it is only necessary to state that there were only 1,800,000 of the ova of the whitefish placed in this establishment at Clarkston, and that at least one-tenth of them were spoiled by standing in stagnant water too long before being placed in the hatching-boxes, which was accomplished on the 18th day of November, 1874.

Deducting the 10 per cent. which were lost in the start, leaves only 1,682,000 good eggs to start with. These eggs were well looked after by experienced persons from the time they were placed in the hatching-boxes until about the 1st of April, being about four and a half months, which is the natural time for their incubation, the water being at a uniform temperature of about 32½ degrees Fahrenheit.

The means of hatching by this improved process is so perfect in its arrangements that it only cost, to hatch out the number which were actually hatched, being 1,500,018, together with many thousand brook trout, as follows:—

1 Foreman, $100 per month, 4½ months	$450·00
2 Experienced men at 12s. per day, 249½ days	374·25
6 Girls to pick dead eggs, 6s. per day, 143 days	107·25
Total	$931·50

It will be borne in mind that 5,000,000 of this class of fish ova could have been hatched with only one additional experienced man, and the extra help in picking, at the same rates per day, would cost $2,017·25 to hatch the 5,000,000, being about 40 cents per thousand. Can any one show such favourable results in hatching this class of fish ova?

As fast as these fish were hatched, they were separated from the shells by means of the simple process as above described, and left in clear running water, to be transported to the waters designed for them at the pleasure of the Superintendent.

These young fish were transported to 194 different lakes in different parts of the State in such perfect condition that it is asserted by those who had them in charge that there were not to exceed one dozen in the whole 1,500,018 that were lost. This is believed to be without a parallel in the world, considering the delicate nature of the fish.

It is admitted by all who have had any experience in hatching this class of fish ova, that they are the most difficult of all others to carry through the process of incubation.

Not more than two persons on this continent and, as far as is known, throughout the whole world, have this species of fish eggs ever been hatched successfully to any great extent, and it is well known, so difficult has it been found by any process heretofore known to hatch them, that many pisciculturists, who are breeding other varieties of the salmonoid family without any difficulty, they have made total failures in their attempts in hatching this variety, and have abandoned the attempt in despair.

All other species of fish can also be hatched by this process, with equal additional advantages: in fact, by this greatly-improved process fish-breeding is made so plain and cheap that any one who has fair reason and common sense, can embark in the business with an assurance of perfect success, and thus may the whole waters of the world be made to produce more wholesome food for its teeming and rapidly-increasing population than the land we till.

For the satisfaction of those who take an interest in the increase and growth by artificial means of this delicate and valuable whitefish and the food that sustains them in their infancy, the patentee has ascertained, both scientifically and practically, within the last few months, and soon hopes to lay his information before the public.

This important improvement was invented by the Hon. N. W. Clark, the celebrated fish-breeder, of Clarkston, Oakland County, Michigan, who obtained his patent through the Mechanic and Inventor Association, Detroit, Michigan. Mr. Clark desires us to cordially invite all interested to visit his establishment and see the operation of his plans, or he will be happy to furnish any further desired information, if addressed as above.

No. 45.

Mr. R. J. Creighton to the Under Secretary.

Sir,— San Francisco, 27th October, 1879.

I have to acknowledge receipt of your letter of the 13th September. In reply, I beg to state that I have signed vouchers for advance, and enclosed it in a note to the Cashier of the Treasury, as requested on voucher. Touching the whitefish, I shall not fail on their shipment to telegraph, and the instructions last year and this were superfluous, inasmuch as this was the course I adopted myself on a former occasion without any instructions at all. I am sorry that any inconvenience or loss occurred last year, but I deemed it prudent not to risk sending the ova at an advanced period. If the eggs had been forwarded and had not proved a success the loss of them would have been more discouraging to the cause of acclimatisation than any expenditure the colony could have been possibly put to, under rational management, providing for their reception. I have, &c.,

G. S. Cooper, Esq., Under Secretary, Wellington. Robt. J. Creighton.

By Authority: George Didsbury, Government Printer, Wellington.—1879.

Price, 9d.]