

# PROGRESS

With which is Incorporated  
THE SCIENTIFIC NEW ZEALANDER.

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## EDITORIAL COMMENT.

### The Murray Marine Structures.

SEVERAL enquiries have been addressed to us  
about the Murray Marine structures which  
were described somewhat fully in PROGRESS  
last month. Of these the most important  
is "Are there any of these in use anywhere  
and if so where?" So far in our reading we  
have not yet come across any reference to  
anything more than the theory. The basic  
principle appears to be the only thing before  
the public so far, and that principle has  
obtained the approval as we showed last  
month, of several distinguished authorities.  
When the first construction is completed, as  
seems a thing quite probable, and before long,  
PROGRESS will have an account of the same.

Another enquiry was as to the cost. About  
this there can be no difficulty, as the cost of  
building the kind of marine structure for the  
application of the basic principle of the in-  
vention is well known. Ships and caissons  
and cylinders of steel are built every day  
in every part of the world. The estimate  
of the American engineer, Mr. Schuyler,  
may therefore be relied on as fairly accu-  
rate. He sets it down after elaborate  
calculation at £94 per lineal foot. For the  
purpose of comparison he has given the  
costs of some well known breakwaters of  
the ordinary type as follows:—

Dover, England	..	per ft.	£348
Plymouth do.	..	"	192
Alderney do.	..	"	164
Holyhead do.	..	"	160
Algiers, N. Africa	..	"	116
Portland, England	..	"	114
Marseilles, France	..	"	106

A third enquiry regards the danger of  
corrosion, our correspondent being apparent-  
ly under the impression that corrosion must  
be a fatal and rapidly acting enemy. He has  
not noticed the explanation of the inventor  
which we gave at some length in our notice  
of last month, that the structures can be  
painted at any time easily, and that below a  
certain depth they will not require that  
protection being protected by the sea growths  
(barnacles etc) which effectually keep the  
air bubbles from contact with the surface of  
the structure.

Lastly the enquiry is for the address of  
some authority who can supply information.  
We suggest application to the office of the  
*American Shipbuilder* New York.

### Shaving Without Razors.

RECENTLY there appeared in that enterpris-  
ing newspaper the *Daily Mail*, an account of  
an exhibition of "razorless shaving" in a  
room of the Canon Street Hotel. The  
victims lay back in chairs while the operator  
smeared their faces with "Razorless Shaving  
Powder." They waited ten minutes while  
a photographer "took them": there was  
an audience of barbers. At the expiration of  
the ten minutes the operator used as razors  
a comb, a post card, and a match-box; the  
victims went away shaved perfectly clean,  
and the audience of barbers retired in gloom.

Some days later Dr. Sanctuary, M.D., of  
28 Caversham Road, who had seen the para-  
graph, wrote to the *Mail* a note of solemn  
warning. He pointed out that certain salts  
—the sulphides of barium and potassium—  
when made into a paste with soap powder  
and starch will, after an application of a few  
minutes, soften and disintegrate the hair,  
which may then be scraped off with any  
blunt instrument, leaving a smooth surface.  
"These salts are," said the doctor, "the  
bases of most of the advertised depilato-  
ries, and besides being extremely poisonous  
in themselves are uncommonly irritating to  
the skin." He could not of course dogmatise  
with any certainty about the particular  
powder used at the Canon Street Hotel, but  
he would not be surprised if chemical analysis  
—which he recommended in every case to  
every possible victim—were to reveal a  
poisonous mineral irritant. He predicts  
crops of pimples, painful eczema, and in case  
of internal application—not an unlikely  
consequence of smearing the mouth and jaws  
with the stuff—death.

There are it seems two sides to every  
question, no matter how alluring.

### The Mystery of Life.

It is the mystery which has perplexed man  
since the beginning of the world. But if  
what was said by a lecturer at the Rooms of  
the Royal Society, Melbourne, a few days  
ago be true this mystery, dark and complex  
as it is, will be known thoroughly, and ex-  
plainable by chemical and physical laws.  
The fact that Professor Osborne, who was  
present, agreed with this conclusion is  
suggestive. Medicine till the discovery of  
the microbe in our own time, remained where  
Galen left it, but surgery made leaps and  
bounds. The discovery of more microbes  
induces the belief that medicine is beginning  
to make up some of the lost ground. The  
above lecturer—Mr. A. C. H. Rothera—said  
"that the shrine before which the seeker of  
life worships is the cell. Life springs from  
the cell and ceases with any change in its  
functions. Those functions are the outcome  
of chemical process. Life is a chemical  
process, and an irreversible change in the  
process means death. Now if, as this  
seeker holds, and professor Osborne agrees,  
life will one day, not far off, become a know-  
able thing, it may be possible to control  
these chemical changes. When the German  
scientist announced that one day we shall  
subdue the microbe of old age he saw the day  
of control beginning to dawn. Already  
many well-known diseases have their microbes,  
and in some instances the right use of the  
microbe copes successfully with the disease.  
The result leaves much to be desired certainly,  
but the march of progress has begun, even if  
the progress be slow. Chemistry like elec-  
tricity, is of yesterday only, and both are in  
their infancy. Who shall say what develop-  
ments are not before us? The salutation  
of the East "O King live for ever!" acquires  
in this light a new meaning of sincerity.  
One likes to think that the day will come  
when the "Great Majority" will cease to  
be the majority, by reason of the abolition  
of all the natural causes of death. The  
question of burial will then have few terrors,  
and the idea of cremation will be shorn of  
most of its interest. There will be a new  
question more vital than either. How shall  
we feed the undying millions? Science will  
find the study of condensed foods profitable,  
and the drawing of substantial nutriment  
from the sea and the air will be pursuits com-  
parable in emotional interest only with the  
search after the "Philosopher's Stone,"  
and the "Elixir of Life." Clearly science  
after saving the millions from death must not  
let them perish from hunger. (See page 343.)