
 tower part out the eases. whinend fead tho a
0
 . This automatic circuit breaker is so
arranged that it will make and break
the cirovit in arranged that it will make and breat
the circuit in the same manner as
telegraph operator would when man pulating his Morse key in the act calling. In this way it will be see that the sparks from the secondry
the coil are intermittent, and their ation is governed by the length time during which the automatio ci cuit breaker allows the circuit to closed while making the dots an
dashes. Immediately in front of scillator, which coned the improve oscillator, which consists of two solic
brass, balis about four inches in diam-
eter, mounted so that the distance between them is adjustable.
Outside these balls are placed tw
smaller balls about an inech and a hal Outside these balls are placed th
maller balls about an inch and a ha
in diameter attached to sliding bra in diameter attached to sliding brar
rods, on the outer end of which ar
other balls one inch in diameter, so that the distance between the large
and the small balls can be easily ad
justed. The secondary terminals of the coil are connected to binding posts on
the base of the oscillator. The distance
the between the balls being properiy ad
justed and the current turned on from
jut justed and the current turned on from
the battery, the sound of the second-
ary sparks passing between the balls can quite easily be recognized as the
DOTS AND DASHES OF THE SIGNAL In another part of the building, di-
rectly opposite and about two hun-
dred feet distant, is placed the receiv-
are which consists of a Clarke conerer

 dition
six inch bell is is continually ringing
out the Morse signals, and holding
down the hammer of the bell the sound
den er can be distinct.
the same call.
In the centre of a garden is placed
ond In the centre of a garden is placer
a large tank of water and a miniature
war ship is placed in this tank and
floated over a submarine mine. which
fle边
 er to an insulated
ten feet in the air.
When the time cor exploding When the time comes for exploding
the mine under the ship, the oscillato
is stopped and connection made at the tank betwen the coherer and the vi
brating bell which is used for test
ing purposes. ${ }^{\text {The }}$ oscillator is now ing purposes. The oscillator ins now
started for an instant or oe if the
bell at the tonk rings, thus proving
that the coherer is in proper adjustthat the coherer is in proper adjust-
ment.
The bell is now disconnected and con-
netion made to the submarine mine
instend and at a signal from an atnection made to the sulmarine mine
instead and at a signal from an at-
tendint the man the transmitter
andin presses the button, which throws instead and at a signal from anitter
tendant the man at the transmitter
again resesses the button, which throws
the current into the oncillator The co-
herer completes the local circuit and
 mine is prov
ectrical fuse

UNABLE TO WALK.

## A Dstressing Malady cinreal hy Dr. wilnams' pink Pill From the Hartland, N.B., Ad



##  <br> (G्य? A HAPPY HOUSEHOLD. <br> By Mardaret lee,

"What did he say to thatr"
That if remen reall accepted sueh
theory it must be a great comfort to

## "Another sneer." "Whes." "What's that fellow's namer' "Oar never mind, he graduated year with all the honors, so he arsturb your peace of mind. Fat gisew quite interested in him-liste gre his dit

$\qquad$
 When
from the
had been
heme for
and
$\qquad$
$\qquad$ mere youth doesn't include everythin
worth knowing or hang in this world
 jovel She's the prettiest creature I'v
seen for years
"Pshaw! You men are all alikel On
would thint mes. Wourd think there was no
world like physical beat
"I wish there was more world wish thare. was morticularly in of it in the the family
I see no reasso You sont then lad your disappointment
"I know 1 did." here, didn't you?"
"Ano I as his judgment and experience con fa
depended apon,
din with fine ressults. Why don't you re
joice in then thospect of having your
desirel Three months ago, you wer his examination; and now you are
angry beause, boy like, he is finding
ingpiration in the societ, hy of an honest
warm-doing-hearted girl Why, she has been
haven't efool, aod ali this afternoon.
hor years." so young and light-hearted  :






 it iko boy yor oumy


## FLASHES OF FUN.


 Little Clarane-Father difterenoe between firmness and obsex my mener-Moraty Wimoum mut mary. berd ho hiona
 as the finest submarine navy in tho
$\qquad$ Clara-When I was out on my wheel
this morning I eracked my ename


 Ihave notiecer, mid the Cumminsililo aet ind it prowan to mate the rosad-








 and cill what is it, dearr she said














##  



 sarted would be the resent it the the semer
should strike an icoberger white we are

 | right alang, |
| :---: |
| had |
| hap hepened |








the "Father, why don't you buy a place
just here, settio down among these sin-
cere people, who have always known



 Were, and keeping them alive and
gorous taxes and my ingenuity and
strength. This is to be a good finan.
cier.'.
And you have no real comfort-""
"Well, it is the penalty for being
ambitious." ambitious."
"Hut how will it end"
"God knows I ril
some ste in harness, and
cern."

 us put our heads. together and try
obtain them :

is a sensible change of method. Min
ish you ound have heard Mrs. Min-
urn talking about your She remembers
u ever since you were bora. She was
 four brothers, and their acting wa
inimitablel So she was speaking of m
boynood m . had merry times then."
"She described the fire-works in "th
$\qquad$ men become restless, dissatisfied, an
bitious," he sighed. "Your mothe
doesnt, regard me."
"You have some rights, father. Lee When nice people lived quite ne the
Battery and sent their children the
to iplayp
"Perfoctly."
"Great Soott ".

"She described meeting you when
lad on your way to school, with you
hooks under your arm. You were so
handsome. Sho used to stop the car

fessor Anthon's Grammar schoo Four
Union Square was the centre, and Fouth stree was the Sunday pro
teenthe.,
menade.,
menade." "She says that in those days a man
with one hundred, dollars was pointed
out on a wonder." "It wouldn't buy a house and on
now One can hardy ranize the growt
of the eity, the increase of wealth. It
takes away one's breath just to think
on of it.".
pier no
por
more
on more in the way of luxury ${ }^{\text {" }}$. s muc
 whole secret lies in the fact that the
sure possession of wealt bring ame
bition. That opens new worlds to us
We wat to conumer them. Rut hap
piness vanishes. The hollow attractions




