

Chicago Nov 22 (1874)

Friend Opre

I have found considerable difficulty in keeping the platinum points from oxidizing and I cant understand why as the spark from the Eagles battery is not intense. It must be in the inferior quality of the platinum and in our instance I found German Silver for the points

Now how would it do to have our point of platinum and small strip of gold - wont that do? I find that hardened steel point on platinum <sup>strip</sup> is good and keep clean - something must be done in that direction its one of the vital points I am afraid to put in a ~~extra~~ resistance to arrest the spark as the armature may stick - Its got to be a clean open and shut affair - I know its where we are apt to have trouble especially <sup>where</sup> it is not a sliding connection. I am speaking now on Relay points and I believe its where the trouble is in the

C & N West - I was for 10 days or more  
trying to find out while at Hawatta and  
I could not if I hadnt done it in the  
dark. There was one of the worst faults in  
the Signal business - Don't feel afraid and it  
may not happen again -

Let us hear from you  
if you have anything to offer -

Hope this will find you  
improving - I wrote you twice before. My boys  
are all asking for you. Regards to all.

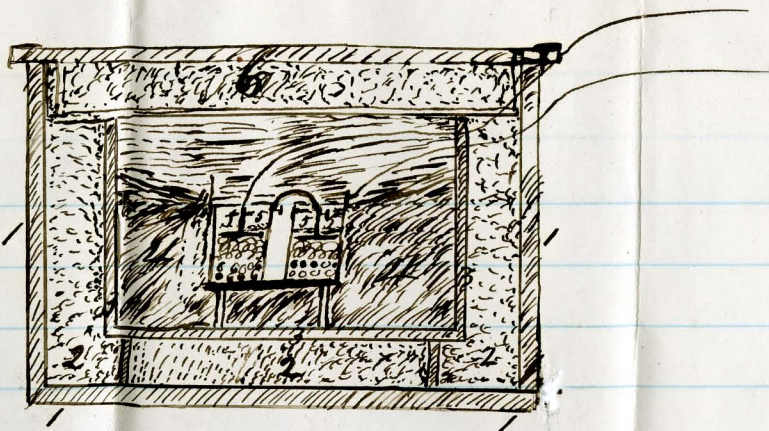
Yours Truly

S. C. Handcock

P.S. In the clock work arrangement for new patent  
please consider the extra mag on back as in old patent  
that is to hold the cog locked until train is  
through. <sup>Section</sup> Also examine the brake wheel on shaft for  
repeating signal - and the Circuit to draw in  
and Signal arrangement. The Circuit is drawn  
by the draftsman as I intended. The repeating signal  
I think is not shown

Yours Truly  
S. C. H.

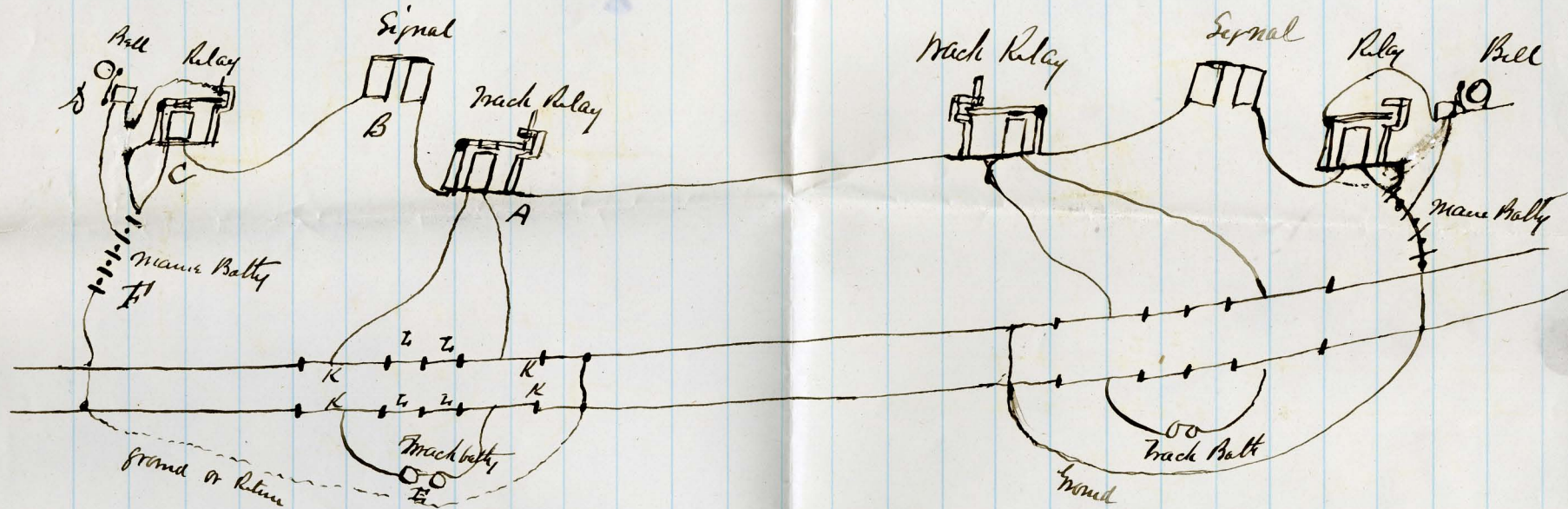
A



- 1 outside Box 3 to 4 ft square
- 2 dry sand
- 3 Inside Box 2 to 3 ft square
- 4 Sawdust from Cedar or Yellow pine (dry)
- 5 The Cups the sawdust packed tight around cups - on top of cups news paper or paper of kind so as to keep out the air
- 6 The top cover to all filled with sawdust

Frank) at Hamilton and Lydenham I have the above for the truck battery two cups each set up in quantity form. What test I have had it to seems to be all ok. Theo - 10° above 0

# 7 Junction & Sydney house



- L L L L - 4 short rails - 4 feet long
  - K K K K - 4 . 30 or 60 ft rails
  - A Track Relay
  - B Signal
  - C Relay for Bell
  - D Bell
  - E Track Batty
  - F Main Batty
- and two cups are used  
for bell when main circuit is  
open

You will see I have taken in  
all the rail I could for the  
ground as the nature of the  
Earth is dry. I get by this a  
Metallic circuit