

Automatic footbridge platform system on Railway platform

Yashwant Patole¹, Vishal Mahajan², Akshay Pardeshi³, Pavan Kumavat⁴,
Ms.Parneet K. Chowdhary⁵, Ms.Rajashree Kadam⁶

ABSTRACT

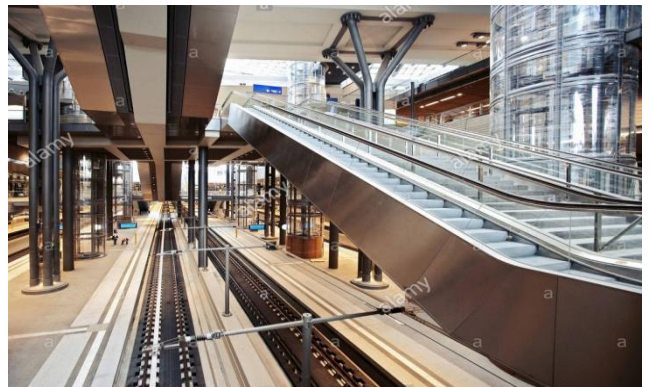
There are many old peoples suffering from leg cramps walking difficulties leg vain problems and chronic foot pains etc. That's why to solve this problem we are making a solution for that is we are going to make a project on a horizontal adjusted platform which is connected between both stations platform.

Because due to this there will be no need to climbing on a bridge by adults as well as children's. This will be time saving for passenger with a smoother operation going to experience by the peoples o by passengers.

I INTRODUCTION

The short horizontal platform will be attached to both end of the two platforms by which we can adjust it after and before coming of train by moving or sliding them horizontally by the sensors and motor. The one part of the bar or platform is connected from first platform to second part of the bar will be moved or slide to the second platform very smoothly according to presence or absence of train. That will maintain the comfort ability of the peoples which will going to suffer from them.

System requirement:-as per the overall old system which is given below (escalators & bridges) are used for crossing platforms from one to another platform. That is very painful for in our indian countries...but escalator implication on per platform in india that is not possible because the less civilization as well as the cost and maintenance is more. Adults peoples can't get there trains because of being late due to the process of climbing on the bridges and due to kids too.





These are old technique to climb on bridge. Due to this we may goes to late for our upcoming train. Also due to electric bridge (escalator) more electricity required to drive the motor which is lives under the escalator. Also the uneducated person directly crosses the trains' routes. This may be dangerous for their life.

Now, to overcome this problem, we prepared this project. By which the problem of more electricity consumption can be reduce to less. Due to this unwanted accidents can be prevents. This also time saving much more than the other remaining techniques.

II PROPOSED PLAN

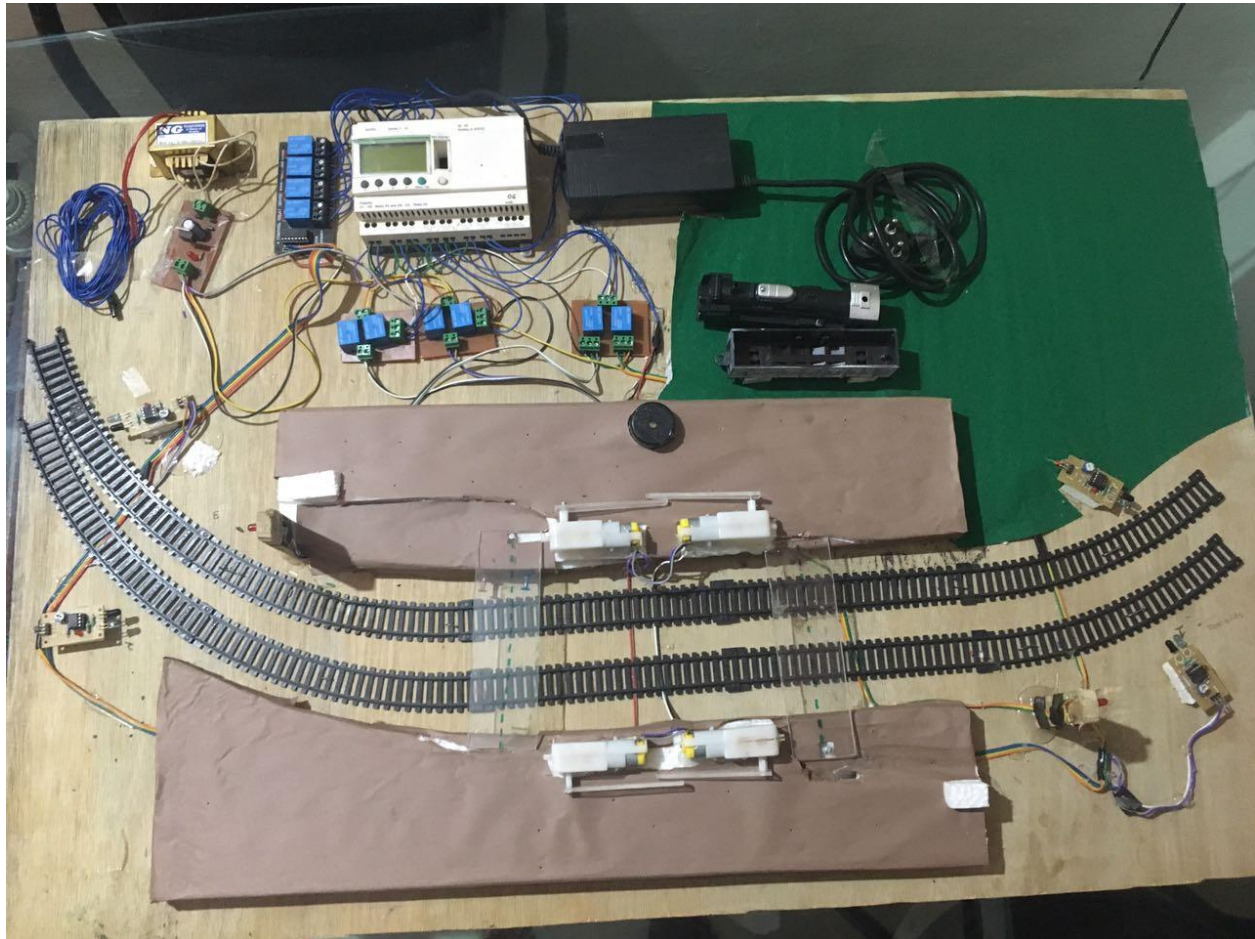
AS per the given abstract the proposed plan or working will be same. As soon as there are two platforms in general i.e. platform 1 is 'a', and platform 2 is 'b' our siding platform is 's'. There will be having the availability of sliding platforms attached to per stationary platform. now whenever there will be no train on the platform this sliding platform is in close position, but when train is being coming or its at specific distance the controlling signal will be given to sliding platform and it will be going to opened before the coming the train. This is providence for the safety purpose of peoples who will be crossing the sliding platform. Along with the controlling signals; buzzers are also provided. We are going to maintain the more and more safety as well as reliability of our project. After the train departure, again the alert will be given and Barra gates of the sliding platforms will be opened after that; as regular process peoples will cross there sliding platforms safely and gradually. Highest accuracy of the system will be there, because there is lack of time for closing and opening of Barra gates and the sliding platforms (s).

III WORKING

When there will be no train being present there then, the footbridge will has been closed and peoples or senior citizen will cross it with all safety providence. When the train at the specific distance away from the platform then buzzer will sound for close Barricades at platform as well as the remaining peoples those who are standing on

footbridge they will cross the platform and after that the footbridge tends to close because the train is coming on platform accordingly with all safety measures will have been done.

After closing of footbridge signal will indicate the GREEN signal, so that train can proceed further. If any fault or problem occurs in system, footbridge will not open; in case of this signal will indicate the red light & train will stop. So there is no risk of any type of accident.



III ADVANTAGE: 1) Less power is used.

2) The system is Simple, economic and compact.

3) No need to climb bridges over platform to cross the track. There is no need of lift, elevator.,

4) Time saving.

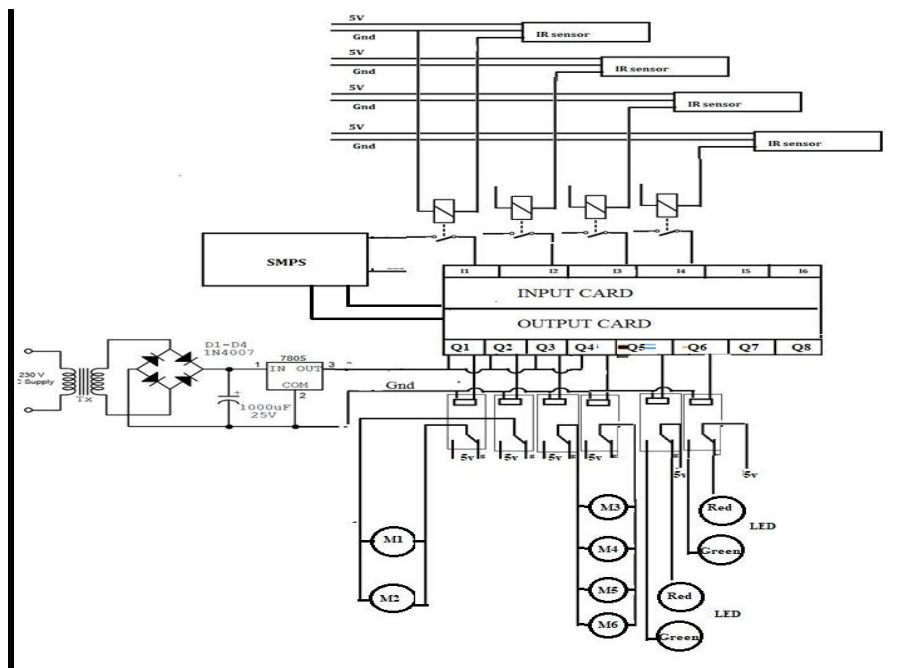
5) Less costly.

6) If there is any fault in the system then the system can be operate manually.

IV DISADVANTAGE: 1) There is specific limit of weight on the sliding platform.

2) External support is required.

3) Periodic maintenance is require.



BLOCK DIAGRAM

V CONCLUSION

The project will save the energy comparatively to elevator, because of this project crossing of platform will be so easy. This project prevent the level of accidents. Peoples who have factures, leg cramps, chronic foot pains and etc. they also can cross the platform easily as well as it is also helpful for the senior citizens who have problem for crossing the platform by using the bridge.

AUTHOR:-



PAVAN A. KUMAVAT
EDU.:- DIPLOMA IN THIRD YEAR ELECTRICAL
COLLEGE:- GURU GOBIND SINGH POLYTECHNIC, NASHIK
MARKS:- 67%



	YASHWANT S. PATOLE EDU.:- DIPLOMA IN THIRD YEAR ELECTRICAL COLLEGE:- GURU GOBIND SINGH POLYTECHNIC, NASHIK MARKS:- 77%
	AKSHAY K. PARDESHI EDU.:- DIPLOMA IN THIRD YEAR ELECTRICAL COLLEGE:- GURU GOBIND SINGH POLYTECHNIC, NASHIK MARKS:- 65%
	NAME:- VISHAL V. MAHAJAN EDU.:- DIPLOMA IN THIRD YEAR ELECTRICAL COLLEGE:- GURU GOBIND SINGH POLYTECHNIC, NASHIK MARKS:- 80%