



National Innovation Foundation

Student Award

Idea: Post box alarm

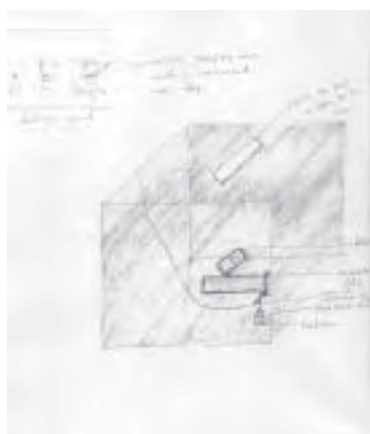


**Kum. B. Swetha**

### Post box alarm

Post box alarm is a device to sound an alarm as soon as something is dropped in a letterbox placed far away at the main gate of a large farm or housing premises. It has a light-spring-loaded flap fixed at the bottom of the letterbox. When the postman drops the day's mail, the flap is deflected and this is made to give out a pulse-alarm in the household. The alarm may be a short-duration hoot or light flash. Emptying the letterbox automatically resets the device.

There are several patents granted to various innovations concerning post-box delivery systems. Almost invariably every system does indicate when mail is dropped in the box. However, the exact method to achieve this varies except USPTO (United States Patent and Trademark Office, no: 6433684) (filed Dec. 21, 2000 and granted in Aug. 2002) which is very similar. However, her entry was received by N.I.F. in July 2001. In many cases the principle used is that, opening of the mailbox sets off an alarm. Swetha's idea is to use a down-to-earth, simple mechanism that would cost almost nothing to maintain. The innovation, considering especially that it comes from a school student, is indeed noteworthy and deserves appreciation.



Swetha is a twelfth standard student of J M J High school, Hanam Konda, Warangal district, Andhra Pradesh and has become a 'habitual innovator'. She had won an award in the NIF's first competition also. With her innovative mind, she keeps on thinking about the ways and means to make life comfortable for ordinary people. Her technique is simple. She keeps on searching for little problems in day-to-day life and does not rest till she finds some solution to each of them. Despite the preparations for the examinations, she spends some time every day for thinking about the innovations.

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Idea: Dynamic shoes generating energy



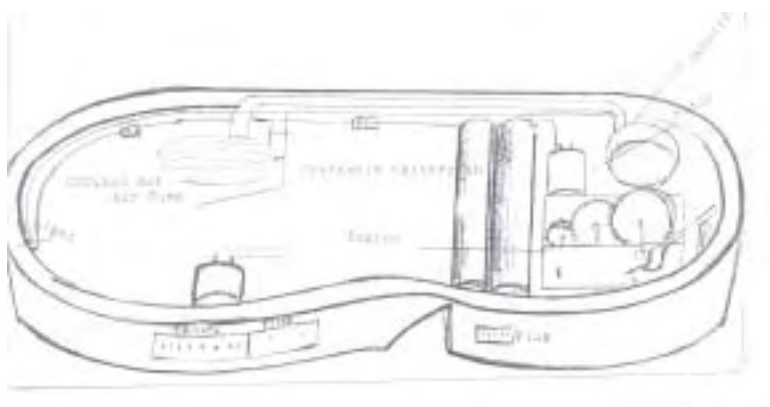
**Sunil Kumar, Pankaj Sharma, Pooja Sharma**

### Dynamic shoes generating energy

The idea is to design shoes, which can tap energy generated/produced at every step while walking. At the base of the shoes a device may be fitted, which could regularly run a small dynamo while walking. The energy could be transformed into electric energy and stored in chargeable battery, which can be used as the energy source for gadgets like cellular phone or hearing aid.

A small heater may also be fitted inside the shoes, which could help to keep the feet warm during acute winter. It may be fitted with small air pump, which could work with pressure of feet and help to circulate air within the shoes, thereby reduce perspiration of the feet in shoes, foul smell and risk of infection.

Three students have put in a combined effort to develop this idea. Pooja is student of ninth standard, Girls Senior Sec. School, Kullu. Pankaj and sunil are in eleventh standard, Government Boys Senior Sec. School, Kullu. Smt. Bhavneshwari Devi, mother of Pooja and Pankaj Sharma helps them in nurturing these creative ideas, and other projects. They have high hopes to do some thing innovative, new and scientific in future when they grow up.



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