## Necessity is the mother of invention

Meaning: When does one get new ideas? Only when one faces a problem which has no known solution .

Then one begins to look out for new methods. And if one is determined, one finds an original solution.

Alternatives: Where there is a will, there is a way. Every problem has an answer.

Illustrative Story:

The year was 1891. Whitcomb L. Judson of Chicago, got up early. He took a bath and moved over to the closet .

He pulled out the clothes he chose to wear. He carried them along, stood before the dressing table mirror and hummed a folk song while he got into a pair of pants .Then he wore the shirt .

He tucked the shirt into the pants and buttoned up the pants and the shirt .

He combed his hair, wound a scarf round the neck, pushed his feet into a pair of socks and surveyed his reflection in the mirror .He was pleased with his image, "I look smart," he told himself.

Off he moved to the shoe rack. He chose, from among the shoes, one pair which seemed to go well with his clothes .

He carried it with him, sat down on a chair, slipped his feet easily into the shoes and started fixing the button which would hold the shoes tight .

"Ugh!" he scowled when he found one of the buttons

missing. Where had it vanished?"! will trace it and fix it," he told himself.

The search began. Judson looked under the carpet. He peeped below the cupboards .

He ran the broom through the corners. The missing button eluded him. It was nowhere to be found.

Judson fretted and fumed. He cursed the button, chose another pair of shoes to wear and went out on his usual rounds .

He told himself, "Buttons let me down badly. I shall not forgive them .,.

I shall get rid of them. For that I must find a better means of making the shoes hold to the feet".

On return he began the search for an alternative to buttons. Several ideas came to him .

One of them appealed to Judson. He thought of strips which would lock in easily .

One pull and the strips would get together. A reverse pull would separate them .

After many trials, he found out how he could do it. He named his innovation "Clasp Locker and unlocker for Shoes ". Today we know it as the ZIP.

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