

Edwin Land

"An essential aspect of creativity is not being afraid to fail."

Edwin H. Land, "Din" to his friends and family, was a born experimenter and scientist whose inventions revolutionized optics and photography. ~~and who during~~ During his long career, ~~held~~ he earned more patents than any American in history aside from Thomas Edison.

From a very early age, Din was fascinated with light, and possessed of an unstoppable drive to understand how the world worked. A bright student in high school, he devoured every y book on light and optics he could find.

Din went to Harvard to study chemistry, but by the end of his freshman year, left school to pursue his own studies in polarizing films ~~—~~ films that can block some light but let others pass. His chemistry experiments with his films were more interesting to him than school.

Letting in some light

After a near accident ~~at night~~ with an oncoming car at night, Din was interested in finding a way to reduce the glare of headlights. If he could stop some of the light, but not all of it, it would be possible to see the light but not be blinded by it. His solution was a polarizing film that could be applied to lights, windows, or eyeglasses.

Most light sources ~~—~~ like the Sun, lamps, and flames ~~— and so on~~ emit ~~lightwaves~~ light waves that vibrate in many directions. Din invented a polarizing film that operated like a coin slot in a vending machine: ~~Only~~ only coins oriented in one particular direction can pass through the coin slot. ~~Only and~~ only light oriented in one particular direction can pass through a polarizer, thus reducing ~~light levels, and glare in particular~~ glare.

[photo of various Polaroid products]]

Some of the early uses of Din's films. By 1937, his company, the Polaroid Corporation was enormously successful, selling all kinds of polarizing products. Ironically, the automobile industry never adopted Din's anti-glare headlight proposal.

Instant pictures

Din's most revolutionary invention came to him while he was on vacation. ~~about on vacation in Santa Fe, NM.~~ After ~~taking~~ Din took a photograph of his daughter, she asked why she couldn't see her picture right away, ~~but had to wait for the film to be developed.~~ Within an hour, Din had conceived of a camera and film system that would ~~allow people for the first time to take pictures~~ enable people to take photographs and see the results almost immediately.

In 1948, the Land Camera system was introduced to the public, to universal acclaim. The film consisted of a negative sheet and the chemicals necessary to create a positive picture, all sealed in an airtight pod. When a picture was taken, the user would pull the pod out through a pair of rollers, squeezing the chemicals over the negative and producing a photograph in a minute.

[artifact: Polaroid camera]

Polaroid Land Camera model 95a

Fifty-seven cameras were sent to the Jordan Marsh department store in Boston during the Christmas season, more than enough. Din thought, to satisfy potential demand. All the cameras were sold that first day.

[photo: Edwin Land]

Even after Polaroid became a successful company, Din refused to rest on his success. He was famous for conducting marathon research sessions where he would have to be reminded to eat and sleep. ~~His~~ That rigor drive and his willingness to try new things were essential aspects of Din's character and his success as an inventor.