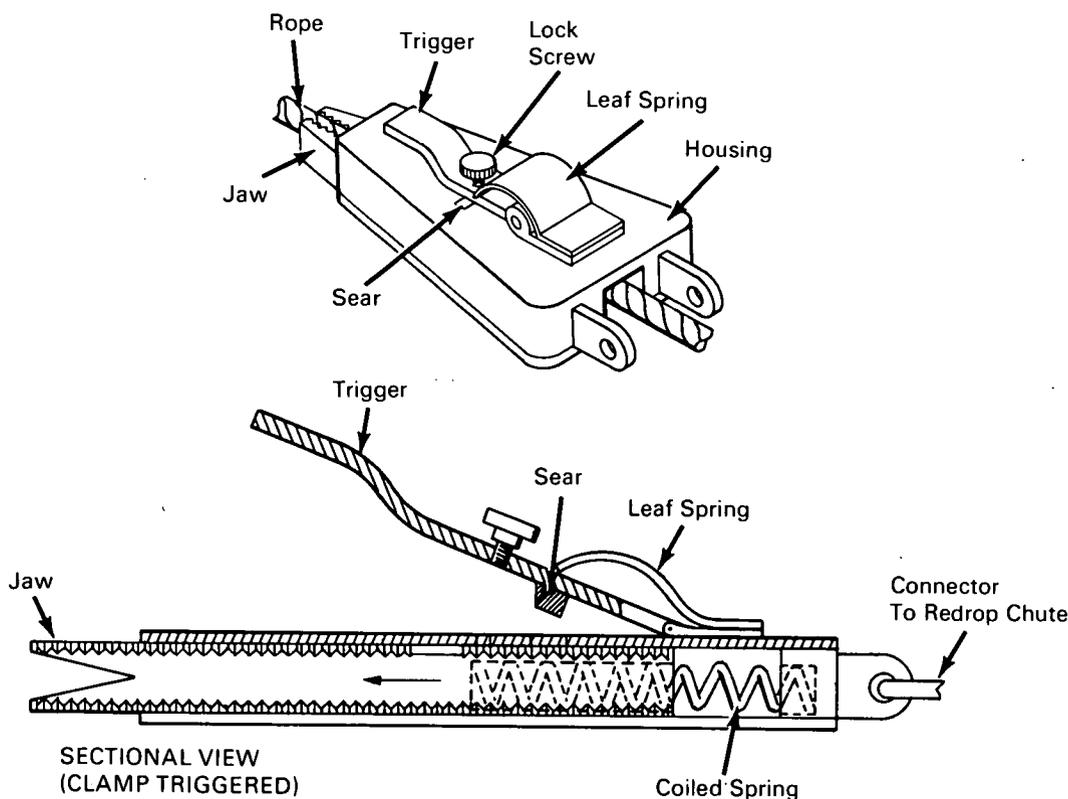


# AEC-NASA TECH BRIEF



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## Quick-Attach Clamp



An improved clamp of the slideable jaw type, which has been invented, can be quickly and easily applied to moving lines such as cables or ropes. Although prior art clamps are quite efficient, there are many situations where the jaws of the clamp get in the way when applying the clamp. It is generally necessary to hold the jaws of such clamps apart manually to permit the line to be placed between the jaws. In the case of a heavy, moving cable it is awkward or dangerous to hold the jaws apart in order to

effect clamping. An example of the need for a clamp that can be easily and safely applied is in attaching a redrop parachute to an aerial recovery package as boarding the package would be hazardous. In attaching a redrop parachute, the recovery aircraft crewman attaches the redrop parachute to the tow cable with a clamp. The tow cable is then cut, releasing the package along with its new (redrop) parachute.

The new clamp has trigger-operated jaws that can be easily actuated to attach a redrop parachute to a

(continued overleaf)

moving tow cable. The trigger mechanism maintains the jaws retracted in the housing until they are released for clamping. A sear on the trigger engages a groove in each jaw to hold the jaws retracted. A leaf spring maintains the sear in the grooves before the device is triggered. Two coiled springs force each jaw into clamping engagement when the sear is raised by trigger action. A removable lock screw is provided to prevent accidental tripping of the trigger.

With the jaws retracted, the clamp is placed in close proximity to a moving cable, and when correctly positioned, the trigger is raised to release the sear. The coil springs will then immediately snap the jaws

into engagement with the moving (or a stationary) cable.

**Note:**

Details are described in U.S. Patent 3,378,892.

**Patent status:**

This invention has been patented by NASA (U.S. Patent No. 3,378,892), and royalty-free license rights will be granted for its commercial development. Inquiries about obtaining a license should be addressed to NASA, Code GP, Washington, D.C. 20546.

Source: A. E. Vano  
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