

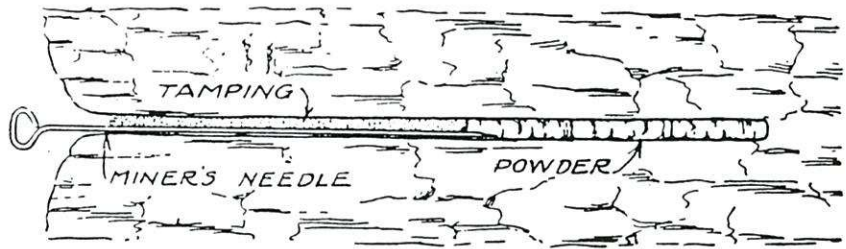
Squibs

by Brad Ross

The squib (also known as a match, reed, rush, etc.) was used in the Eastern states mostly by coal miners to detonate black powder explosives. The squib is a small paper tube filled with quick burning powder and has a slow match at one end. The match end acted as a fuse to give the miner time to evacuate the area. The quick burning powder propelled the squib into the drill hole much like a bottle rocket during the Fourth of July. Sparks from the squib would detonate the explosives when it reached the black powder.

Two types of squibs were used: Sulfur and Gas. The Sulfur squib match end burned with a flame when lit because it contained sulfur. The Gas squib match end was impregnated with a composition that glowed without a flame. The Gas squibs were supposed to be safer when used in gaseous mines because the match would not ignite methane in the area. Unfortunately, they proved unsafe because of the large amount of sparks that were produced by the rocket action. The miner used the following procedures when blasting with squibs and black powder:

- a) Drill hole
- b) Place black powder cartridge in the end of the drill hole.
- c) Place needle* into black powder cartridge.
- d) Tamp stemming into hole around the needle.
- e) Pull out the needle.
- f) Place squib in hole left by the needle.
- g) Light match end of squib and run like h--l.



A bore hole loaded and tamped with miner's needle in place. The needle is withdrawn, and a miner's squib inserted in the opening thus made.

* The needle is a thin copper rod, usually 5 to 6 feet long. It had a loop handle on one end and was pointed on the other, therefore the term "needle."

Following is a page from a mining catalog and two examples of squib boxes.

MINERS' SAFETY SQUIBS

FOR FIRING BLASTS IN COAL MINING

FIG. 4737.

Daddow & Beadle's (yellow label), burns with a flame, for general use, 6-in. long.
List price.....per 1000, \$1.50

Daddow & Beadle's (red label), burns with a spark, for use in mines containing gas or fire damp, also suitable for general use, 6 inches long.
List price.....per 1000, \$1.50
100 in a pasteboard box, 10,000 in a case, weight per case about 35 lbs.

Powell's rocket (yellow label), burns with a flame, for general use, 5 inches long.
List price.....per 1000, \$1.50

Powell's gas (red label) burns with a spark, for use in mines containing gas or fire damp, 5 inches long.
List price.....per 1000, \$1.50
100 in a pasteboard box, 10,000 in a case, weight per case about 26 lbs.

SAFETY SQUIB MFG. CO.'S "BLUE LABEL"

Considered the best squib for general use. Packed 100 in a box, 100 boxes to a case. Sold only in case lots.

List price per 1000. \$1.50

HOWELL'S "BLACK DIAMOND" SAFETY SQUIBS

We make these Squibs in both sulphur and gas and put them up in whole or half cases, as desired.

A case consists of 100 small boxes and each small box contains 100 Squibs, making 10,000 Squibs to the case.

Gross weight per case, 28 lbs.

Price per case.....\$10.00

SQUIB CASES



FIG. 4738.

Tin. Size 8x1½x¼ inch, holds 100 Squibs.

List price. per dozen. \$1.20

One dozen in a package, weight per dozen about 1½ lbs.

