

The Radio Bomb

By C. M. ADAMS

"YOU'VE been wantin' proof. There it is!" With a gasp of astonishment the group about the big stove in Preston's store leaned forward with a jerk, necks craned, mouths and eyes wide, staring in wonder at the object old Tom Waldon had drawn from beneath his big sheepskin coat.

Cylindrical in shape, it was made of heavy steel, measuring about two feet in length by four inches in diameter, and painted a brilliant red, save at one end where the figure "6" was stenciled in black.

"What does that prove?" Dick Preston demanded, from his perch on a cracker barrel.

"Prove?" Waldon repeated, glaring up at the boy who questioned him. "Just what I've been tellin' you—that he's a 'spy' and he'll blow us all up if we don't stop him! Why, me and my hoss would've been blown to pieces this mornin' if it hadn't been wet from layin' in the snow so long!"

"What is it?" Pete Bailey asked in an awed whisper.

"A bomb!"

With a clatter of upsetting chairs the terror-stricken group fled precipitately to the opposite end of the store.

"Don't get scared!" Dick laughed, slipping down from his barrel and taking the tube from the old man. "Look!"

With a twist of the threaded cap he removed one end of the tube and poured out in his free hand a dirty brown wet powder.

"It's gunpowder!" Waldon exulted.

"Powder, nothing; it's sand and ashes and dirt!" Dick scoffed. "Watch!"

He jerked open the door of the glowing stove and threw in a generous handful of the material. On the red-hot coals it lay in an inert mass, while one by one the group tiptoed cautiously back to see and regain courage.

"Course it won't burn when it's wet," old Tom defended. "That's why it wouldn't go off this mornin'. It was layin' right in

the middle o' the road at the end o' my lane and my hoss almost stepped on it. So I gets out and picks it up after I'd seed it was wet."

"Suppose it was gunpowder. What does that prove anyhow?" Dick demanded, resuming his seat on the cracker barrel.

"He put it there!" the old man declared. "Did you see him?"

"Them boxes and crates and barrels and things he had me haul up, was mighty heavy," Tom Sullivan affirmed.

"Yes, and what's that thing he's been carryin' around that pretends to be a surveyin' instrument?" Pete Bailey demanded.

"All that don't prove a thing!" Dick retorted angrily. "Just because he doesn't choose to tell you what he's here for, and everything about his business, you think he's a spy. Why don't you be reasonable?"

"I am reasonable," old Tom grinned maliciously. "I hain't takin' no chances. I sent down to Squire Jefferson's this mornin' for a search warrant and when it gets here, I as constable, will go to that cabin and see just what he's doing there and find out if he can't give some reason for actin' the way he does!"

"That's the stuff. Good for you, Tom!" a half dozen endorsed.

"Yes sir, I think it was time we was a doin' somethin' besides sittin' around here talkin' and wonderin' and lettin' him have a chance to blow us into next week!" the old man continued importantly, opening his coat so that the nickel-plated star showed plainly. "This here bomb," and he tapt the tube in his lap, "sort o' set me to thinkin' and I'm goin' up the first thing in the mornin' if that search warrant comes up on the mail this afternoon."

"You're doin' just right, Tom!" Pete Bailey declared. "I was just wonderin' if you was goin' to let him run loose around here, while you're constable."

"You bet I won't!" that official boasted.

But Dick Preston did not endorse old Tom Waldon's new decision. For a moment he sat on his cracker barrel, staring in surprise at the old constable and the group about the stove which was so loud in its support of his new plan of dealing with the mysterious and undesirable stranger.



"... Straight as an Arrow the Uncanny Thing Came, Showing Momentarily the Glimpse of a Humming Propeller. . . . A Huge Column of Spray and Ice Spouted Skyward From the Jam, and—Where Had Been the Towering Ice Barrier, the People of Pine Flat Saw the River—Yellow, Swift and Turbulent, Running Free and Clear Thru the Gap and Down Past the Hamlet."

"Who else would?" Waldon parried. "Who's been prowlin' around here all hours o' the day and night? Who's been livin' in a cabin on Pine Mountain by himself all winter and not sayin' what he's up there for? Couldn't he shoot up the whole valley with a cannon up there?"

And then without a word he slipped to the floor and past out into the house which adjoined the store and mounted the stairs to the room which he occupied under the eaves.

A worried frown puckered his brow as he seated himself at a table covered with a bright new set of wireless telegraph instruments, and his frown deepened as he adjusted the detector and inductances.

"Suspicious old fool!" he growled as he slipped on the head receivers. "I hope we can beat him!"

"H D, H D, H D, D P," the white spark in the gap crackled in clean-cut Continental as he tapped the key.

Again the call repeated before he threw over the aerial switch.

Then, "O K, D P, H D," sounded the clear reply in his receivers.

"News to report. Coming up," the spark snapped.

"O K," the reply buzzed.

Slipping receivers from his head Dick drew on mackinaw, mittens and cap, as he went rapidly down the stairs, and paused on the back porch to adjust a capable looking pair of snowshoes.

Then off up the slope which rose abruptly at the rear of the building he swung, laying a course eastward to where Pine Mountain reared its low broad bulk against the skyline. For a half hour he climbed, leaving behind the hamlet sprawled in the valley on the broad flat just below the narrow gorge where Pine River rushed swiftly between steep high banks. But not once did he turn to look back at the cluster of houses or to glance up at the dazzling glory of the late afternoon sun on the clean crisp whiteness of the deep snow which covered the whole country.

With the worried frown deepening between his brows he mounted steadily until he topped the last rise and came out on a broad flat summit, where, in the midst of a large clearing, stood a cabin.

It was different from the usual mountain cabin in that it was long, narrow and low and windowed at but one end. Otherwise, except that from one end a span of glittering wireless antennae rose in a long slant to a tree at the edge of the clearing, it was quite the usual rough log structure.

Dick drew off his snowshoes at the door and stepped inside without knocking. He found himself in a small room, evidently partitioned off from the main windowless apartment. Stove, bunk, a table spread with a litter of papers, and the other usual furniture made it seem like the ordinary cabin room. But at one side stood a table on which was spread the elaborate wireless instruments connected to the antennae wires. It was similar to Dick's set except that above the table was a row of carefully dialed instruments marked "Distance—height—speed—direction—shot control."

Dick had barely entered and drawn off his mackinaw when the door leading into the other room opened and a tall man whose erect military poise contrasted strangely with his grease-smearred overalls, entered.

Dick saluted.

"Good afternoon Captain," he said.

"Hello, Dick," the tall man replied, returning the salute. "What's the matter? Didn't the tests work right?"

"Oh, they were fine!" Dick answered. "It's old Tom Waldon again."

"Oh, your worthy constable and defender of the peace and safety of the commonwealth," Captain Hardy laughed, as he drew up a chair beside the stove.

"It's nothing to be laughed at," Dick protested, while the concern deepened in his face. "He's sent for a search warrant and is coming up here to investigate you and what you've been doing."

"Whc—e—e—ew!" the tall man whistled.

"What's the matter now?"

"Number '6' fell in front of his house last night. He's all worked up about it and now he's certain you're a spy. The search warrant will be here tomorrow morning if the mail's on time; then he'll ransack the whole place. If he'd only keep his fool notions to himself and not try to be buttin' around into other people's business!" and Dick kicked savagely at a block of cord-wood beside him.

"Of course I don't want to stir up any trouble," Hardy began thoughtfully. "You know I could resist search by him."

"But he's got the whole bunch worked up to believing the same as he does," Dick put in despairingly.

"Yes, that's true," Hardy replied. "But to come back to something more important, how did the tests come out?"

"I have the locations here," Dick replied,

WATCH FOR THE SEPT. "E.E."
"X-Ray Tubes for High-Frequency Coils."—A subject of extreme interest to all those owning radio transmitting apparatus or high frequency coils, by Dr. Frederick F. Strong.
New Electro-therapeutic apparatus, by H. Rosenthal.
The Marvels of Radio-activity, Part II (with some wonderful illustrations), by Jerome S. Marcus, B.Sc., (Ch.E.)
Invisible Radio Aerials that "Spies" might use.
The first electric apparatus—The first incandescent lamp; the first dynamo; the first motor, et cetera.
A New Popular Scientific Article, by Rogers D. Rusk, B.Sc.
Selenium Cell, Design and Construction by Thomas W. Benson.
An Automatic Storage Battery Charger, by Lewis Scriven.
Making an Electric Clock—Part I, by Thomas Reed.
Are There Currents About a Magnet? by F. F. Mace.
The Franklin Electric Club, as founded by William J. Hammer, and his message to the "Electrical" and "Radio-Bugs" of To-day.
Unusual Entertainment Stunts with High Frequency Currents—With several startling photos of actual stunts.
Announcement of Prize Winners in the "What to do with your radio set during the war" contest.
Besides these leading articles the September number will fairly bristle with dozens of live, up-to-the-minute electrical, scientific and radio articles of interest to all of our readers.

drawing a notebook from his pocket. "Number '6' fell in front of his place, and the rest—"

For a half hour the two bent over a detailed map of the valley while they compared figures and locations.

"That's fine! The biggest variation is about four feet and that's corrected by the adjustments I've been making to-day," Hardy breathed in satisfaction, as he straightened up. "Now I think if we can run a test with a real charge instead of those dummies we can be prepared to announce results."

"I know a good target for it," Dick volunteered. "It's a big pile of drift and rubbish down by the bend just below town. Its doesn't belong to anyone. Sec—" and he pointed out the spot on the map.

"Good! Just the thing!" Captain Hardy endorsed. "What do you say we try it this

evening? If your friend the eminent detective is to come up here to-morrow with his search party, we can tell him everything, if the test is successful."

"That suits me," Dick agreed.

"Very well," Hardy replied. "We'll set the time for nine o'clock then. Get your 'interference' going and we'll see how this tryout works."

"All right, sir. I'll be ready," Dick replied. "And I hope that warrant doesn't get here in time," he added as he smiled thru his anxious frown.

"Don't you worry about that," Hardy advised.

"Yes, but it makes me sick," Dick protested. "When a man's trying to do what you are and then for him to plot against you! It makes me want to hit him!"

"Oh, never mind," Hardy laughed. "Just you go to bed to-night and get plenty of sleep. We may have to run another test if this one doesn't work and I'll have to have you fresh and ready, because you're responsible for half the success of this thing."

"No—no!" Dick protested, while he blushed with pleasure.

"Yes, but you are," the tall man insisted. "I couldn't have done a thing without your 'interference' and the other ways you've helped. So just go along and forget that old spy-chaser."

But Dick could not shake off the thought of what the old man might do to wreck Captain Hardy's plans. All the way down the long white-covered slope he wondered and pondered, as he tried to find some way out of the complication into which his friend was drifting with the local officials.

"Has the mail come in yet?" he asked his father as he tramped into the kitchen and found the family at supper.

"No," Joe Preston replied. "The trail's getting too soft. That wind's melting the snow fast. Didn't you notice it?"

Then Dick remembered. While he had been in the big cabin on the top of Pine Mountain the wind had shifted to the south and with it had come balmy warm air which had rapidly softened the hard-crust snow.

"I don't like this spell at all. There's too much ice and snow on," Joe Preston remarked.

But Dick rejoiced secretly. It might so impede the trails as to make it impossible for old Tom's search warrant to arrive in time from the Squire down the river.

His anxiety was gradually relieved as all that evening the warm south wind blew and the snow melted. It was dripping from the eaves in pattering cascades when he went upstairs into his room about eight thirty, after preparing his lessons for the 'morrow.

But he forgot it and even old Tom as he adjusted his wireless instruments carefully and cleaned all the contacts and tightened connections.

Then at a quarter before nine his call came in, "D P, D P, D P, H D."

"O K, H D, D P," he responded and the reply came back.

"Ready!"

Throwing over the aerial switch he set to work methodically. For the next fifteen minutes he sent anything and everything, stopping at intervals of several seconds to make swift changes in his transmitting wave length adjustment.

Then just as the hands of the watch which lay before him, pointed to nine, he heard faintly the muffled boom of an explosion from down the river, and with a satisfied sigh slipped off his receivers and crawled into bed.

Day had scarcely broken the next morning when he was awakened by an unusual sound. Sitting bolt upright in bed he listened for several moments before he recognized what it was.

(Continued on page 279)