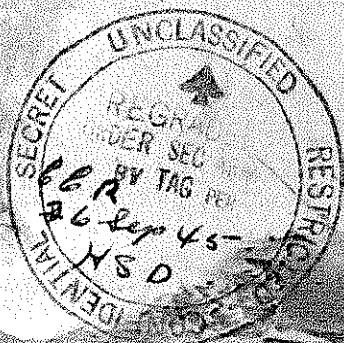


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# COMBAT LESSONS



No. 8

CONSULTATION-RESEARCH-PUBLICATION  
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U. S. Army Military History Institute

*Chap*  
**COMBAT  
LESSONS**

*No. 8*

*Rank and file in combat:*

*What they are doing*

*How they do it*

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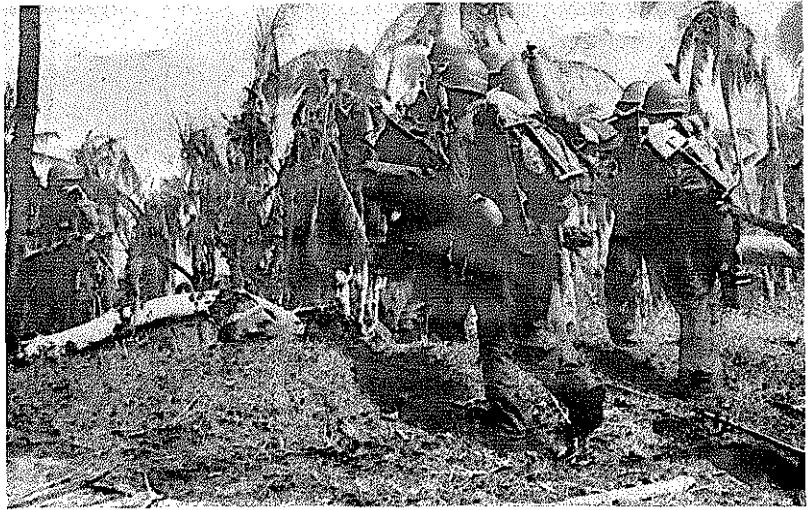
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## Introduction

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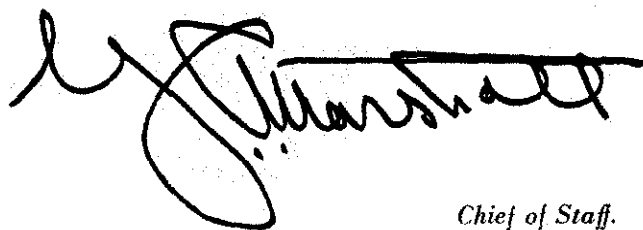
Our Armies in Europe have won their victory. Veterans of the campaigns in North Africa and Europe are now joining forces with the veterans of the Pacific for the final assault against Japan. They are coming to grips with a foe quite different from the German soldier, different as an individual fighting man and different in the tactics employed. Even the most experienced soldier of the European battlefields will have much to learn.

We must now bring to bear against the Japanese all the experience we have gained in every theater. The suggestions made in "Combat Lessons" are drawn from such experience. Since, to be effective, they must reach the soldier promptly, publication is not delayed to insure that

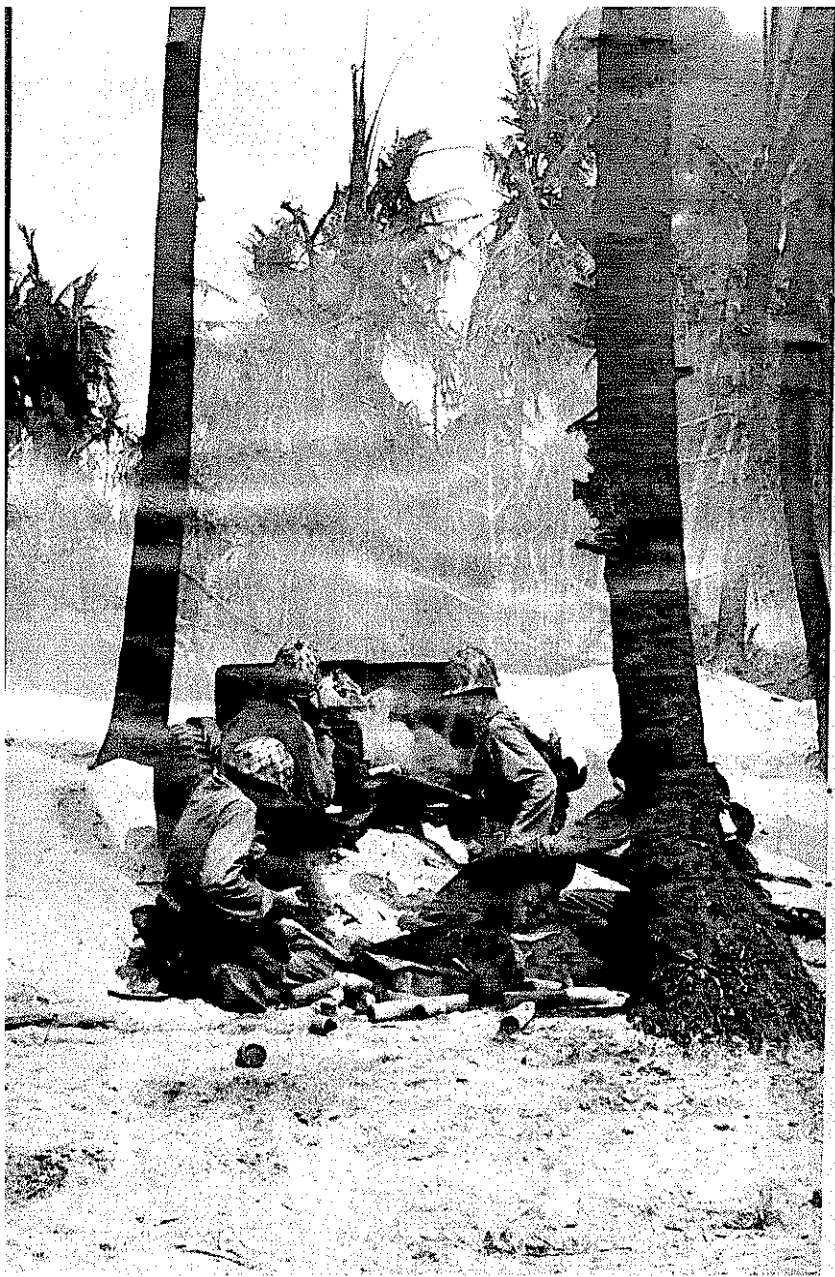


they always represent the thoroughly digested views of the War Department.

The great combat lesson learned from every operation is the importance of *leadership*. Our equipment, our supply, and above all, our men, are splendid. Aggressive and determined leadership is the priceless factor which inspires a command and upon which all success in battle depends. It is responsible for success or failure.



*Chief of Staff.*



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*Contributions from readers are invited either in the form of suitable material or suggestions for future issues. Correspondence should be addressed to the Combat Analysis Section, Operations Division, War Department General Staff, Washington 25, D. C. Requests for extra copies should be made through regular distribution channels.*

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# Leadership



Individual acts of inspired leadership have been recounted frequently to establish what makes a leader and how leaders can be developed. The splendid achievements of inspired leaders have deservedly won public

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praise and military honors, but it is the everyday leadership of junior officers and senior noncoms that is the driving force which results in battle success. The sum total of the unspectacular phases of leadership, ranging from foot inspection in the bivouac to the word of encouragement for the nervous private in the midst of the fire fight, is the real source of combat efficiency.

The following comments on the business of leading men in combat are taken from field reports; they emphasize the value of the leader who, not by glorious example or impossible feats-of-arms but by exercising a sure knowledge of his men and of his work, meets each obstacle of the advance and "keeps 'em moving."

### **There's No Mystery About Leadership**

Says *Colonel C. L. Marshall, Commanding Officer, 133d Infantry*: "I think that sometimes we have made too much of a mystery out of 'leadership.' So much of leadership is just *using the knowledge of human nature* that most of us possess but so often don't use."

### **The Leader Maintains Unity**

An old rule of combat troop handling is based upon such "knowledge of human nature." It states that in an emergency any positive action that is taken begins the restoration of group unity and confidence. Nowhere is this truth more evident—and nowhere is the junior leader's responsibility for seeing that such "positive action" is taken more pressing—than in the handling of a unit which has been pinned down and must be reunified before the advance can be continued.

Said *Lieutenant Colonel S. L. A. Marshall* after studies on MAKIN and KWAJALEIN: "When an advancing infantry line suddenly encountered enemy fire and the men hit

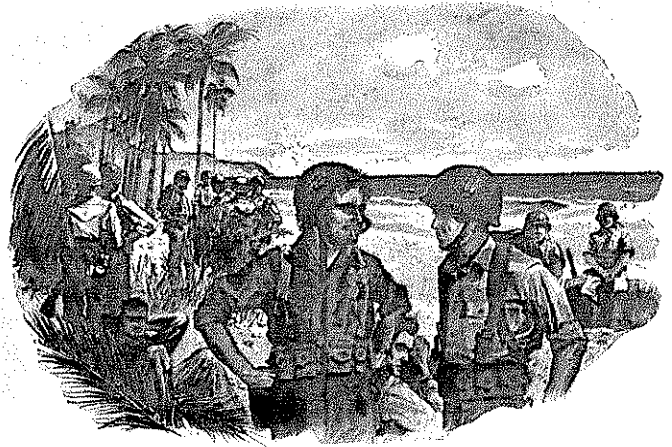
the ground and cannot see each other, all organizational unity vanishes. A platoon leader no longer 'feels' the whereabouts of his squads; a squad leader can be certain only of himself. Much valuable time is usually lost here. Even when there is no real danger, if the men go to the ground it takes some time to resume the advance. Getting the attack started again is a problem. Before a company or group can again become a going concern, some form of communication must reintegrate the individuals. The restoration of unity and momentum depends upon the method of the leader."

### **Some Methods of Reintegrating the Unit**

"The small-unit leader's first thought as he hits the ground should be to determine the location of his men and to formulate a plan for getting them again under unified control. Sometimes a bold individual may stand erect and say, 'Follow me, we're going on.' Some manage it by voice and relay of voice; during action and while the man is prone, his voice will rarely be heard more than 20 to 25 feet. Other leaders look for higher covered ground immediately ahead and crawl up to it so their own men can see them. Others wait for a tank to come and then use it for cover as they walk across the front. The leader's resourcefulness here is an important factor in maintaining the unit's momentum of attack."

### **The Leader Builds Confidence**

An incident, extracted from Lieutenant Colonel Marshall's account of the 7th Cavalry Reconnaissance Troop's EBEYE Island action, shows another aspect of leadership in action.



*"—watch out for spider holes!"*

"In the late afternoon Lieutenant Daniel E. Blue and his 3d Platoon came to relieve the exhausted men of the 2d Platoon. When the 3d reached the front, the men of the 2d were sitting around tight-mouthed. They had suffered several losses and were exhausted. There was no hostile fire. The 3d Platoon advanced at a walk in squad column and kept going. As they passed, the leader of the 2d Platoon told Lieutenant Blue, 'Tell your men that they must watch out for the spider holes. They must search every one of them.'

"Lieutenant Blue then saw for the first time what the 2d Platoon had been up against. As far as he could see up the beach, there was a network of the palm-frond patches which meant danger to his men. He passed the word to them: 'Go at every patch with fire first and then with your bayonet.' He kept telling them that that was what they must do.

### The "Easing up" Tendency Sets in

"They moved on 25, 30, 40 yards. There was still no enemy fire. The men searched the first few lines of holes diligently, ripping the fronds off with their bayonets. They found nothing. Lieutenant Blue noticed that they had already begun to ease up, hitting a hole here and skipping a hole there.

"They went on another 25 yards. The man ahead of Blue stepped across a frond patch and kept on moving.

"Blue yelled, 'Godammit, what are you doing—stepping across a hole you're supposed to search. There may be a Jap in there.'

### —And a Jap Gets a Chance

"A Jap rifle lay across the hole. From underneath, a hand reached up for it before Blue could close the distance. Blue saw the hand; saw, also, that five of his



*"—a hand reached up—"*

men were beyond it and in the line of his fire. He took the chance and fired at the hand. The bullet split the hand at the knuckles. The Jap had started to rise, but Blue's rifle was so close that the blast knocked him back again and the helmet flew from his head. 'Start looking into every hole or we'll all be killed,' Blue shouted to his men.

### **Fear Stalks with the Platoon**

"It was then that Staff Sergeant Pete Deini, came into the fight. Deini had been walking along like the others but had been doing a lot of thinking. He knew there was something wrong with the platoon. He could feel it. He knew the men were afraid. He felt fear in himself. He wondered how he could feel it in the others. Then he got it. The sergeants had clammed up. They weren't holding back; they didn't *look* afraid, but—they had clammed up. The men were accustomed to hearing the sergeants bark. When the sergeants were quiet, it was because of fear, and the men knew it. Despite the efforts of the lieutenant, the men could not rally their own confidence until the sergeants responded to his leadership.

### **Sergeant Deini Starts 'Talking'**

"He found what to him was the obvious: Somebody had to 'talk it up' and keep 'talking it up;' that was the sergeants' job. He saw his duty, and throughout the rest of the afternoon he spark-plugged the whole operation. Moving from group to group, he showed them how the thing had to be done. When he saw men hesitate in front of a spider hole, he went through them, ripped the fronds away, and used the bayonet if the bayonet was needed.

"As he worked, he talked without ceasing: 'Come on! You can do it. Watch me. There are more of them. Keep busy! Keep moving! Keep your eyes open.' Then he moved on to another hole. It was Lieutenant Blue's estimate that Deini cleared out at least 50 percent of the positions covered by the platoon and that the thoroughness of the other men was due almost wholly to him. The other men acknowledged it, only they said their lieutenant shot too low when he credited Deini with only half of the work. His was the clearest voice sounded by a junior leader during the invasion of the Kwajalein Atoll."

### **The Leader Demands Thoroughness**

After a study of numerous combat situations, Lieutenant Colonel Marshall made the following generalization emphasizing another too-seldom credited but very important responsibility of the junior leader: "Almost without exception, infantrymen exercise caution and proper security measures only according to the amount of fire coming against them. When they are receiving fire, even though it be erratic and scattered, they sense danger all about them. But let them for even a few minutes move into enemy ground from which they receive no fire, and they seem automatically to lose all caution and to shirk the work necessary to insure that all enemy installations are neutralized.

"The rarest thing in our records is the instance of the company or group which does a thorough and workman-like job under those circumstances by making certain of every point of ground and not waiting for danger to appear before doing the things which should have been done in the first place. Where such a phenomenon does

occur, it is always because an aggressive and alert junior officer or noncom absolutely refuses to be misled by seeming security and, by personal example, vigorous prodding, and any effective method within his power, forces the unit to take proper measures for its security."

### **Don't Act Worried, Just Act!**

From an American officer who commanded American and Chinese infantry units in CBI: "Men don't like to serve under a 'worried' leader. If you must worry, do it in the privacy of your own foxhole."

The importance of a leader's ability to maintain his own and his men's confidence during reverses is well illustrated by this incident which occurred on one of the small islands of the Kwajalein Atoll. The Japs had made a night counterattack and were temporarily successful. Reports of casualties and minor catastrophes were coming in fast. Several of our positions had been overrun and demoralized; men were running into the CP giving confusing and disagreeing reports. Communications had broken down and some of the officers had begun to reflect the tension of the situation. Colonel Marshall's account describes one junior officer's order-restoring reaction to the mounting difficulties:

### **The Lieutenant Gets Bad News**

"Private Wojcik's harrowing experience in a Jap-infested woodpile had been accentuated by his discovery that his platoon's left flank was completely disintegrated and that the neighboring 1st Platoon was also in trouble. He side-stepped further enemy contacts and ran until he fell exhausted beside Lieutenant William R. Gauger, the platoon commander. He told Gauger that the Japs were in the woodpile and had come streaming down the road



between the 1st and 2d Platoons. He was inarticulate at first but Gauger kept on talking to him until his story began to make sense. Gauger looked him over and found that he had been hit twice in the leg, once by a bullet and once by a grenade fragment. The man had been too excited to notice his injuries.

### **—Does Some Fast Thinking**

“Lieutenant Gauger, after calming the soldier and getting the information straight, took the collapse of his platoon’s left calmly. The young officer was doing a lot of quiet, collected thinking on his feet. He knew he had lost contact with the 1st Platoon. He had tried to reach out for it even before his own left began to fall apart. He had seen the enemy barrage fire on the 1st Platoon’s lines and had seen some of the men hurrying back toward the rear.

“Gauger figured that the 1st Platoon had vacated its forward ground and that the Japs were moving in force down the roadway.

“But Wojcik had said that the Japs were in the wood-pile. That meant that he had a target, though one which involved some risk. Without being absolutely certain that the 1st Platoon had moved back, he decided to take a chance which might turn a bad situation to the company’s advantage.

### **—And Goes into Action**

“He directed his left machine gun to fire into the wood-pile—and keep firing. This put it on a line of aim directly at the 1st Platoon’s former position.

“It is probable that this bold decision, which in effect put a line of fire across the Jap flank and closed the road, had more to do with the restabilization of the

company position than did the coming up of the support. The Jap pressure flagged from that point on. A few small enemy groups continued to come down the road and prowl around where the company's line had been, but they did no further damage to the perimeter.

### **The Situation Is Cleared up**

"Later, the picture of the hour's events was clarified. The Japs had come in with a light machine gun and set it up in the woodpile. The gun had been fired for a few minutes—extremely wild fire from which tracers could be seen bouncing far toward the American rear. The gun never came to bear on any part of the forward line; it was silenced quickly after Gauger put his gun into the action. The Japs who had come with the machine gun continued to mill around in the vicinity of the woodpile. Some were killed by our automatic fire. A few probably got back to their own lines.

"The lieutenant in charge of the 1st Platoon had gradually worked his men back into the forward ground. Artillery fire had been called for and when the shells began falling within about forty yards of the original line, enemy pressure ceased altogether. The last Jap faded from our forward ground.

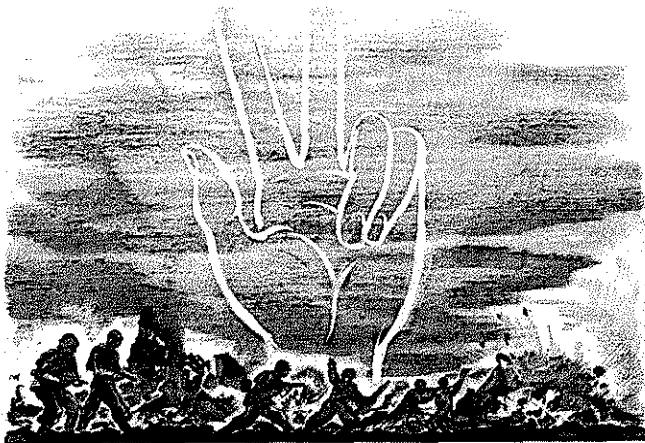
"At about 0230, Gauger walked back to the company CP to talk things over. The CO told him he believed the situation was again fairly well in hand. Gauger went back to his own platoon and sent an experienced sergeant to cross the road and reestablish contact with the 1st Platoon . . .

"In this manner, the line was reknit, closing the one brief hour of successful enemy counterattack during the entire Kwajalein campaign. The night-defense line was never again dented."

## Resourceful Leaders—Our Troops' First Need

The necessity for developing resourcefulness on the part of leaders is underscored in a comment by *Lieutenant General Walter Krueger, Commanding Sixth Army*: "Our most important need is resourcefulness in individuals and in leaders of small groups—squads and platoons. They must be taught throughout their training—especially their early training—to visualize and plan several ways to handle any situation before them, and to be ready to act decisively and promptly according to whichever of these plans is found most promising.

"This training and all other training of troops must take place well in advance of combat or other tactical situations. No further training is feasible after the situation has become tactical."





## On Killing Japs

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Killing the fanatical cave-sheltered Jap soldier has proved a costly and difficult operation. Here are some tips from a USAFFE Report on the BIAK operation:

### **Burning Him Out**

"Gasoline, poured in quantity into windward entrances and ignited by grenades, tends to exhaust oxygen, produce harassing fumes, cause casualties, and destroy enemy ammunition. This method is most effective when floors of the cave or tunnel slope downward from the entrance. Where floors are so constructed, the gasoline method is effective even at leeward entrances.

"The flamethrower is effective for burning out personnel in shallow caves and for covering the placement of demolition charges in cave entrances. In employing the flamethrower with unthickened fuel against shallow caves or leeward entrances of deep caves, flanking bursts should be delivered to avoid the serious hazard of back-blast."

*Since the flamethrower will literally 'shoot around a corner,' the operator should make use of 'bank shots' whenever possible to keep out of the line of fire from Jap weapons within the cave.*

### **Smoking Him Out**

"Smoke, released by portable smoke generators lowered into windward openings, produces harassing effects, especially in confined, damp passages. The same results, in a lesser degree, may be obtained by removing fuzes from a cluster of five or more FS-filled 4.2-in. mortar shells, inserting No. 6 detonators, lowering the assembly into a windward opening, and exploding it electrically.

"Connections with other caves and vents may be disclosed by remote smoke plumes.

"All entrances must be covered by small-arms fire to kill enemy who expose themselves in seeking relief from the smoke.

### **Blasting Him Out**

"The final reduction of the cave defense is usually accomplished by a heavy charge of explosive. The purpose is to produce some cave-in and great concussion effect. Therefore the size of the charge will depend upon the depth of the position. A 50-pound charge of TNT or an equivalent may be sufficient for a cavern with a small entrance and a depth of not more than 50 feet. Five hundred pounds is not excessive for large caves and cave

nets; comparable charges should be exploded at remote openings as nearly simultaneously as practicable.

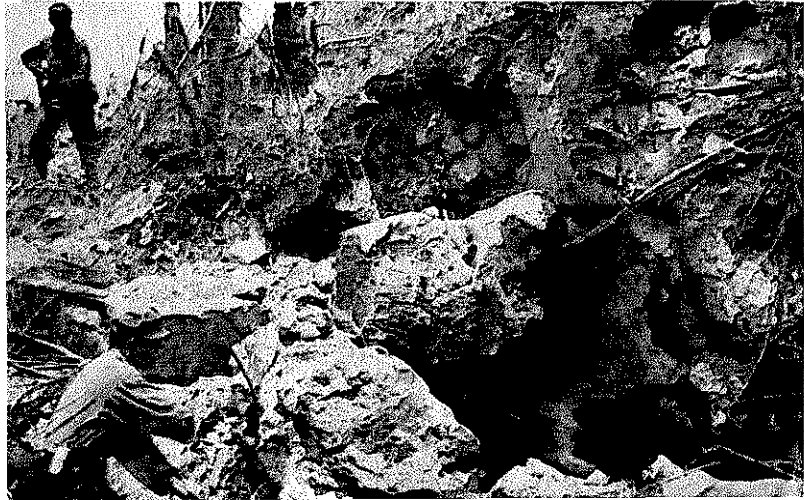
"When it can be determined that the roof of a gallery is readily penetrable from the ground above the roof, the placement of drilled charges may disorganize subsurface communications and lighting, produce casualties, and destroy stores.

### **Burning Off Camouflage**

"Ground and air reconnaissance of Jap prepared defensive positions is almost impossible until screening foliage has been removed. Normally, flamethrowers, HE and WP fires, rockets, or even bazookas are used. Occasionally none of these will work."

Okinawa doughboys came up with a novel solution to one such situation: "To burn away camouflage, incendiaries and phosphorous grenades were lashed together and rolled downhill onto Jap rear-slope positions. This was necessary because the positions could not be reached with flamethrowers, and the defilade and proximity of our

*172d Infantrymen "blasting them out."*





*151st Infantrymen "smoking them out" on Carabao Island, P. I.*

troops prevented the employment of mortars, artillery, or rockets."

### **Incident in a Cemetery**

Another example of fantastic and carefully planned Japanese trickery is described by *Lieutenant Colonel Francis T. Pachler* in a letter reporting the *17th Regimental Combat Team's* march on DAGAMI: "The 3d Battalion entered Dagami cemetery in the southern end of town without any opposition. The cemetery, overgrown with weeds 7 to 10 feet high and containing many old-fashioned Spanish-type crypts (built off the ground), was bisected by an east-west path. As Company L entered the cemetery, Company I came round it on the right to take position for the night—all this with a suspicious absence of incident or opposition.

"The 1st Platoon of Company L followed the lead elements, beating the brush for enemy, but still there was



*Riflemen cover cave exits.*

no trace of opposition. Just as the 1st platoon crossed the cemetery path, however, a headstone tilted back—revealing four Japs, armed with rifles and an American BAR. Small-arms fire did not dislodge these enemy, but a flamethrower proved effective enough.

“At that point, fire from all sides was opened up on the platoon, inflicting several casualties in a matter of a few seconds. The 1st Platoon then organized into ‘killing details’ and pushed through the cemetery, destroying the enemy as they were located.

“Company K, following Company I, deployed two platoons abreast, behind Company L. They, too, reached the center path of the cemetery without incident, but upon advancing through the weeds, received heavy fire from the crypts. The enemy had removed the bodies, punched small holes through the stones, and were using the crypts as individual pillboxes. On the right, a Japanese captain charged our men with his saber, wounding one man before he was shot down.

“The Commander of Company K withdrew his men to the path, reorganized, and then advanced through the cemetery with his men shoulder-to-shoulder. They were



preceded by a battery of 6 flamethrowers, burning and smoking out the enemy. At 1900, when the action was completed, about 35 of the enemy had been destroyed and the regiment was able to close in for the night.

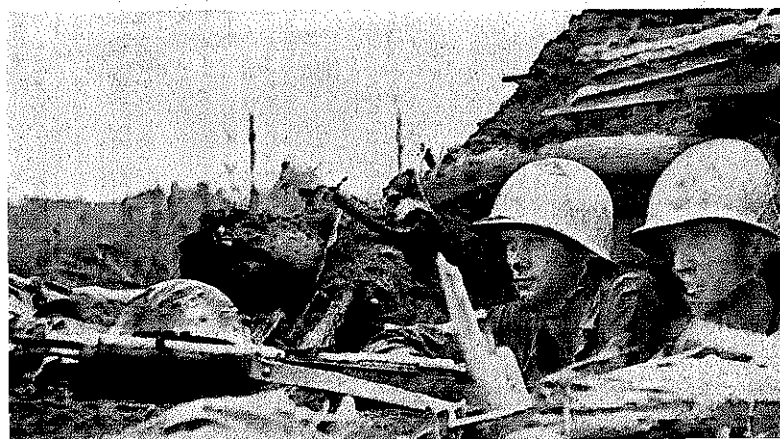
### **Fighting Spirit Gives the Right Answer**

"The Regimental CP was about 50 yards away when the cemetery fight began. Unable to contact 3d Battalion headquarters, the S-3 phoned direct to Company K asking whether the Japs were breaking through our lines. The radio operator's answer was typical of the morale and toughness of the men of the 17th throughout this campaign. He said, 'Hell, no! We're breaking through theirs and fighting for our bivouac.'

### **Finishing the Job**

"By 2000 that night, they had their bivouac. Enemy patrols probed the defenses constantly all night but were given the usual 'one-two' with prepared fire. The next morning more enemy dead were found; they had carried shotguns and flat-nosed, copper-jacketed rifle bullets—possibly dum-dum."

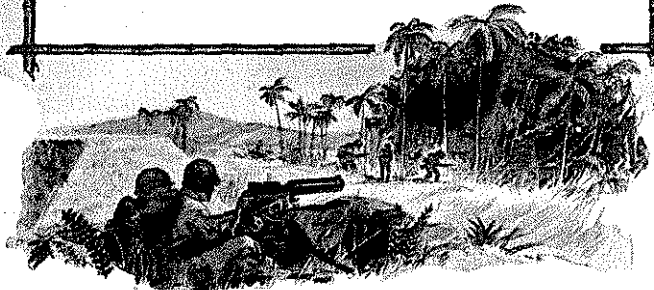
*Trying captured Jap pillbox for size.*



## The 7th Cavalry Reconnaissance Troop

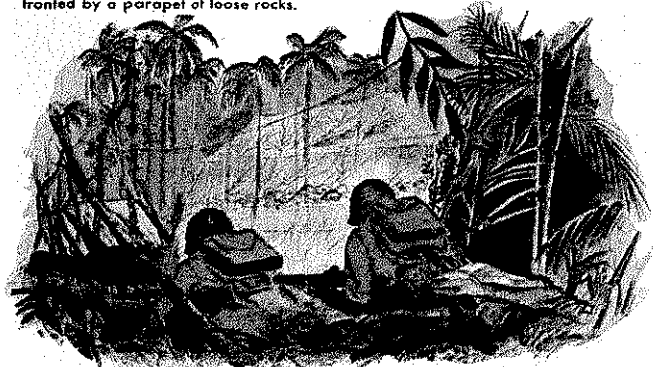
was awarded the Distinguished Unit Citation for the 'high courage, fighting spirit, and practical courage' exhibited in their capture of three islands of the Kwajalein Atoll. Typical of their strenuous 5-day action are these incidents on Chance Island.

The troop was moving down the length of the island, three platoons abreast, scouts about 10 yards ahead. Near the center of the island, they approached a long, low mound, exposed to the fire of hidden Japs known to be dug in nearby.

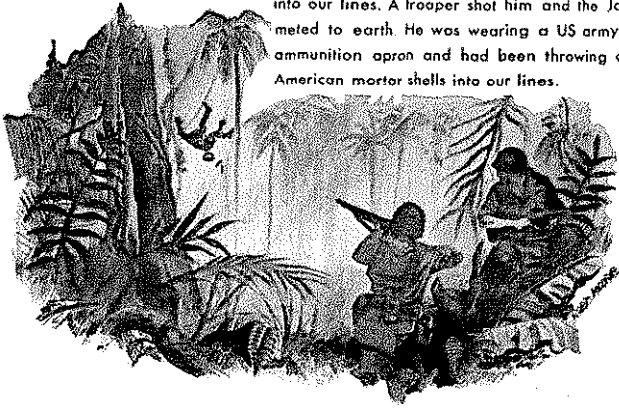


Under cover of LMG fire, the skirmish line parted, skirted the mound, and rejoined on the far side. A base of support and supply had been gained without loss.

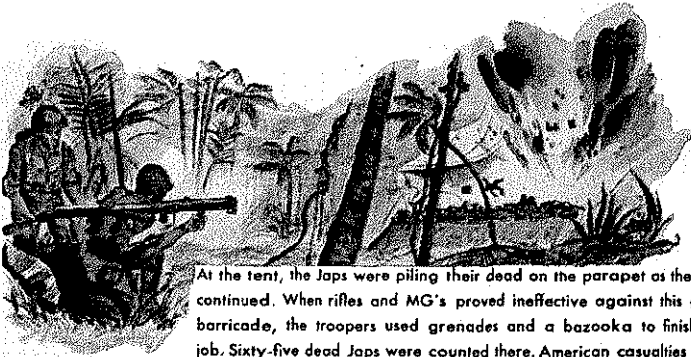
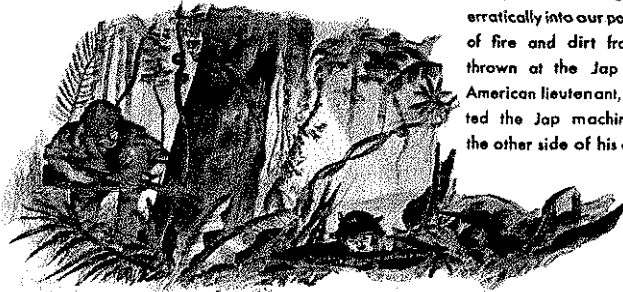
A sergeant trained his machine gun on a row of palm fronds. Screams told him he had picked out the Japs' main position. Two lieutenants had spotted the same target. It was a long, low tent, camouflaged with palms, and fronted by a parapet of loose rocks.



A Jap in the top of a palm tree heaved somethin into our lines. A trooper shot him and the Jap plummeted to earth. He was wearing a US army mortar ammunition apron and had been throwing captured American mortar shells into our lines.



A Jap submachine gun was firing erratically into our positions; bursts of fire and dirt from grenades thrown at the Jap annoyed an American lieutenant, until he spotted the Jap machine-gunner on the other side of his own tree.



At the tent, the Japs were piling their dead on the parapet as the fight continued. When rifles and MG's proved ineffective against this grisly barricade, the troopers used grenades and a bazooka to finish the job. Sixty-five dead Japs were counted there. American casualties were 14 wounded. The 7th Cavalry Reconnaissance Troop had killed its weight in Japs.

# Mortar Suggestions

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## **—On Adjustment**

### **SCR-536 Aids Adjustment**

From the *329th Infantry*: "We have used the SCR-536 for more effective communication between the observer and the 60-mm mortar. It has not only improved support but also has enabled us to emplace mortars where they are safer from enemy fire and where ammunition supply is more convenient."

### **Mortar-Range Code**

From the *Weapons Platoon leader, Company A, 337th Infantry*: "To avoid announcing mortar ranges in the clear over the SCR-536, we use names for the key ranges. For example, 'Love' might mean '1,000 yards.' Code words are changed daily."

### **Train Infantrymen to Adjust**

*Staff Sergeant Edward Grazanich*, section leader of an 81-mm mortar section, *2d Infantry, 5th Division*, advocates the following: "More effective and more accurate mortar fire would result if all infantrymen were trained to adjust mortar fire. A rifleman fighting in the front lines is often in a position to direct fire against targets unseen by the gun crew."

"In the operations in which I participated, the observation post of the mortar crew was usually located from 400 to 800 yards behind the front-line position of the riflemen. The mortars in my company lacked direct observation and consequently had to fire by use of maps and forward observers. When an essential man from a mortar crew is sent forward to observe, the efficiency of the mortar crew decreases. The scattered locations of the targets and the rapidly changing action made

mortar adjustments very difficult without help of the riflemen."

*Riflemen trained to adjust mortar fire can be effectively used only if suitable communications back to the mortar positions can be made available. If a radio or telephone cannot be pushed forward to the rifleman at a point from which he can observe the target, it is sometimes possible to relay his sensings back to the nearest radio or telephone by word of mouth. This latter procedure requires the closest cooperation by all individuals involved.*

*Mortar communications should be utilized whenever possible; the battalion tactical wire and radio nets should be reserved for normal traffic and used for mortar fire missions only in emergencies and when the mortar target is of great importance.*



*"Tactical communications should be used for fire adjustment only in emergencies."*



*Mortar squad in action near Munda airstrip.*

### **—On Control**

#### **Mortar Coordination**

From the *Commanding Officer, 3d Chemical Battalion*: "We have found that the most effective close support from chemical mortars attached to infantry battalions is obtained when the commander of the heavy-weapons company is made responsible for control of all mortars, organic or attached. He can then coordinate all mortar fires with the artillery liaison officer.

"Under this setup, a fire-control center is used only to designate the target and the section or platoon that is to fire; fire adjustment is handled by an observer through direct communication to the mortar firing position.

"Heavy-weapons-company observer teams with each forward rifle company are able, in addition to conducting 81-mm mortar fire, to supplement our chemical-mortar observers. This is accomplished by utilizing a communication relay through the heavy-weapons-company CP to our mortar position."

A Field Artillery Battalion presents another viewpoint on obtaining more effective fire from 4.2 mortars and artillery in support of infantry battalions: "The 4.2-chemical-mortar observers with the infantry can be used to better advantage if they are under the control of the artillery liaison officers with the respective battalions. By having the chemical-mortar observers, the cannon-company observers, and the artillery observers all under one control, the infantry battalion commander has to consult with only one individual, the liaison officer, to obtain the best use of his supporting weapons."

### **Organizing 81-mm Mortars**

The *2d Battalion, 120th Infantry*, uses this plan of mortar organization: "We emplace our mortars so they can fire in battery and employ them so that each assault company has one section for direct support. A forward observer and one assistant from the section accompany the assault echelon. They use an SCR-536 for communication with the section."

### **—On Employment**

#### **Mortar Finesse**

From an officer of the *3d Chemical Battalion*: "We found it a good idea to take advantage of artillery fires, whenever possible, to cover the sound of our mortars. An added advantage of synchronizing our fire with the



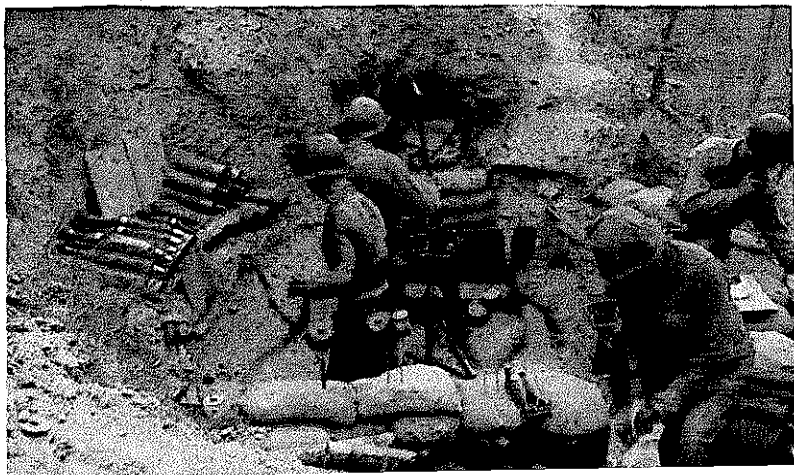
artillery's is the fact that while the enemy is kept down by artillery fire he is less able to observe our mortars' muzzle blasts and thereby to locate our positions."

### **Foiling Artillery-Evasion Scheme**

Reported by the *82nd Chemical Battalion* on BOUGAINVILLE: "It was found that the Japanese took shelter from our artillery fire by occupying positions close to our perimeter in groups the size of companies and battalions. The Japanese especially preferred the reverse slope of a hill or the banks of a deep draw just outside our lines. The density of the jungle permitted them to dig in just beyond the edge of our fire lanes. There they remained safe from artillery fire and carried on preparations to attack.

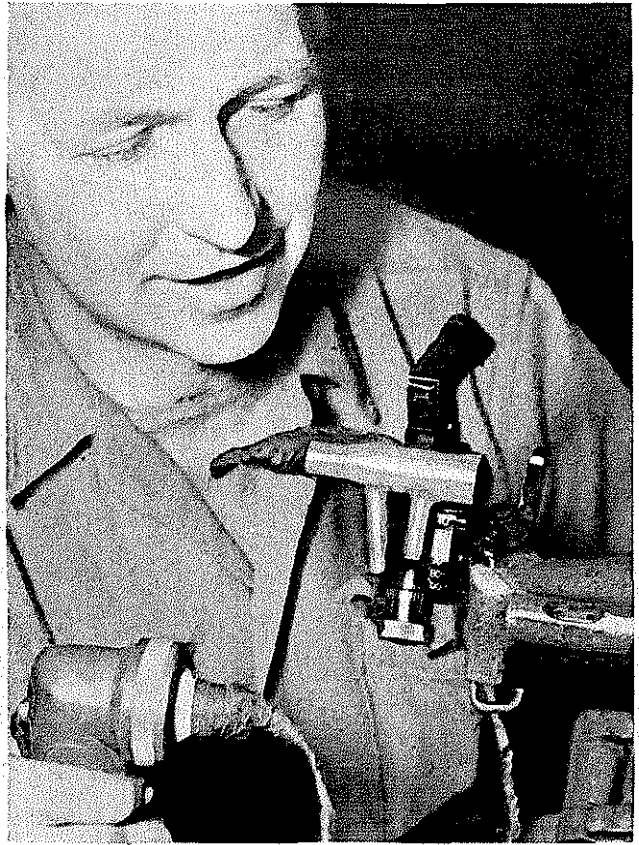
"In one instance, after discovering that the enemy was present in considerable force less than 70 yards from our perimeter, we concentrated all available mortars on that sector and, according to PW's, broke up a Japanese attack in the preparation stage."

*Well-organized 81-mm mortar position.*



### **Mortar-Sight Light**

*Staff Sergeant Oswald Nord* developed this device to illuminate the deflection and elevation knobs of the 81-mm mortar sight for night firing. It is constructed from one .50-cal. and two .30-cal. cartridge cases and an issue flashlight.



## *Aiming-Stake Shortcuts*

### **Stake Lighting**



Reported by the *82nd Chemical Battalion*: "Much of our firing was done at night. Since we are not equipped with artillery aiming-stake lights, it became necessary to develop a means of accurate aiming in the dark. One com-

pany solved this problem by attaching salvage flashlights to stakes away from the gun; the flashlights were controlled by switches at the gun positions. Friction tape was used to cover all of the glass face of flashlight except a narrow slot. Another company used the most primitive expedient of all—fireflies stuck to the stakes!"

### **Stake Setting**

Reported by the *Company Commander, 116th Infantry*: "We set the mortar at maximum elevation when putting out the aiming stakes in order to reduce the error due to the lateral distance between the sight and baseplate socket. Since this error is also affected by the distance from the mortar to the aiming stakes, the stakes should be placed out at least 10 yards, and even farther when feasible."

From *Sergeant Richard J. Collins, Company A, 81st Chemical Battalion*: "A ball of waterproofing fiber stuck on top of an aiming stake and coated with grease compound makes a firm base for a compass and eliminates the need for an even-topped stake."



# Patrolling

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## Patrol Critique

Comments extracted from a *96th Infantry Division* report on the LEYTE operation: "Patrolling became an important part of the operations of this division within its assigned zone.

"The leading scouts of the patrol should be armed with a submachine gun, and at least one man near the center of the patrol should be armed with a BAR to provide fire support in case it becomes necessary.

"Patrols had a tendency to be roadbound and often went right past well-concealed enemy positions.

"Many patrols were poor on orientation because they failed to check their courses frequently with a compass and neglected to make a definite sketch of the terrain features seen enroute. These procedures are necessary



in order that when enemy positions or points of interest are discovered, their location can be reported accurately.

“Guerrillas and other natives were most valuable as guides and scouts, chiefly because of their knowledge of obscure trails. Their information concerning the enemy, however, was usually exaggerated with respect to numbers and vague as to time. It was invariably necessary to pin them down on these points. The Filipino tendency to say ‘yes’ to all questions was a further complicating factor.”

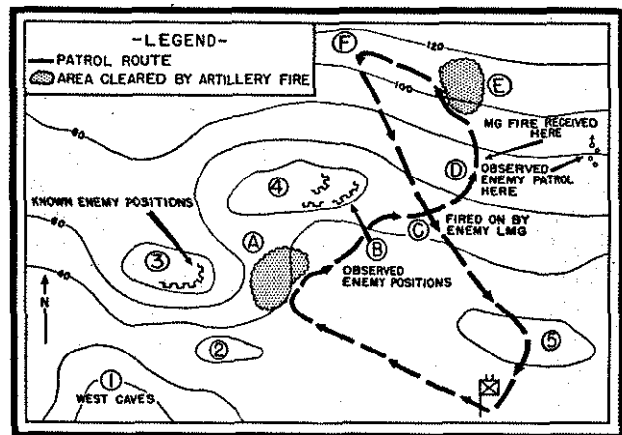
### **To Have—Hold**

Report from the HOLLANDIA operation: “Patrolling itself is merely a means to an end. To be of value during an advance, it must be followed up. Too many times patrols preceding our advance would move over terrain, find it unoccupied, and return to report that fact. The patrol’s movements were usually observed by the Japanese, who, forewarned, moved in themselves. When the main body finally arrived, it would be met with opposition, causing casualties which might have been avoided.”

### Reconnaissance Patrol on Biak

Successful execution of a reconnaissance patrol by 41st Division infantrymen is described in a report of the BIAK operation: "We needed definite information about Japanese strength and defensive positions to our front and left front before we could continue our attack. A four-man reconnaissance patrol was sent out from a forward battalion with the mission of obtaining this information. The men carried only carbines, water, medical kits, and ammunition. The sergeant patrol leader, in addition, was equipped with a lensatic compass and message book.

"The group left the battalion CP on an azimuth calculated to avoid a known enemy position on Hill 3. At 'A,' the patrol leader changed direction to avoid a clearing made by artillery fire; the clearing had not been observable from the CP because of heavy intervening



*Area traversed by the reconnaissance patrol.*

vegetation. At 'B,' enemy voices were heard to the northwest; the patrol halted immediately and the leader signaled his men to positions from which they could observe the enemy.

"Fifty Japanese were located on the forward southeastern slope of Hill No. 4. After observing for 15 minutes, during which time the enemy continued to chatter, completely oblivious of the presence of the patrol, the men moved northeast to point 'C,' where fire from Hill No. 4 made them stop and take cover. A little later the leader observed an enemy patrol of about one squad moving in the same general direction as his own patrol. When he attempted to have his unit 'tail' the enemy patrol, heavy machine-gun fire was received; whether this was enemy or friendly fire could not be determined at the time. (Later, it was identified as friendly fire directed at the enemy patrol.) Our patrol evacuated the area under fire so rapidly that direction was lost. The patrol leader gathered his men and moved cautiously to higher ground to reorient himself, finally succeeding in doing so at 'F.' From there the patrol headed southwest to Hill No. 5 and then on to the battalion CP. The enemy patrol was not encountered again.

"On the strength of the information brought back by this patrol, the battalion commander ordered an artillery barrage and launched a successful attack against the enemy's left flank."

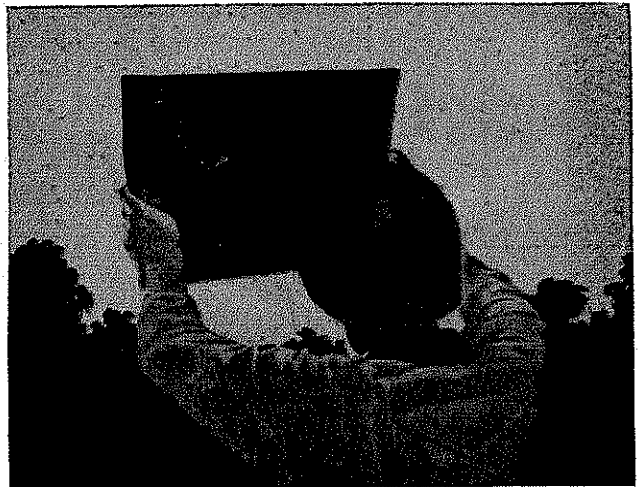
*This patrol leader maintained control of his men throughout the mission, kept his head and made sound and quick decisions in response to changes in the situation, and adhered steadfastly to the assigned mission. These factors account for the successful accomplishment of his patrol's assignment and are essential to the effective execution of any reconnaissance mission.*

## Perforated Maps for Night Patrols

Suggested by an infantry *Intelligence and Reconnaissance Platoon Leader*: "Our platoon learned from the English to perforate maps for use at night. I recommend that this expedient be taught in the States.

"A perforated map is made by punching holes through the map along lines designating roads, stream nets, buildings, and other landmarks. We used a simplified set of conventional symbols for representing the various map details; for example, a double line of dots represented a main highway, etc.

"By holding the map toward the sky and observing the perforations (through which even the faintest light will shine), a man can quite accurately orient himself except on the very darkest of nights."



*"By holding the map toward the sky, a man can orient himself."*





# Field Expedients

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## Mess Kit Methods

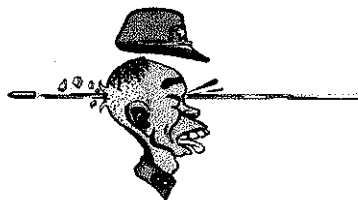
Reported by an *Infantry* unit in GERMANY: "Some battle-wise units prefer to fight without the pack and therefore are without mess kits when hot food does become available. Even when mess gear is in the hands of the troops, the problem of sterilizing the gear sometimes prohibits the serving of hot food.

"Some units have solved these problems by keeping mess kits in the kitchen-train bivouac, sending the kits up with the hot food, and then returning them to the rear to be washed and sterilized by kitchen personnel. Two disadvantages to this method are the bulk of the mess kits and the noise made in breaking down and distributing them."

A variation of this plan has been successfully used by certain regiments in ETO: "Mess kits are habitually kept with the men's packs, but enough pie tins for all line companies are kept on hand in the kitchen trains and sent forward with the marmite cans in proper quantities according to the food breakdown. To facilitate carrying, handled containers for the pie tins have been constructed. The containers may be sized to hold only one platoon's tins or made larger according to the size of the unit that is being served. The pie tins can be distributed quietly and quickly. Each man carries only a spoon, and the company and battalion commanders never have to worry about getting packs and men together before the food arrives."

#### **M1 Flash Hider**

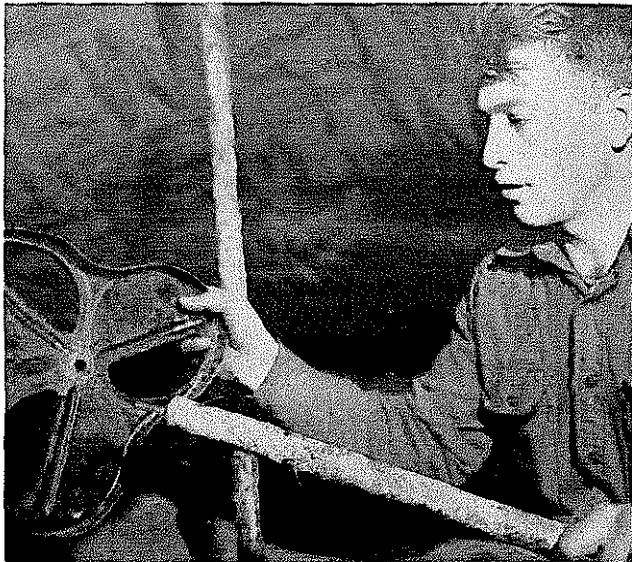
Says a *Lieutenant, Company B, 62d Armored Infantry Battalion*: "We improvised an effective flash hider for the M1 rifle by cutting off the primer end of a .50-caliber cartridge case and securing the case to the muzzle of the rifle. The flash can be seen only from directly in front."



*"The flash can be seen only from in front."*

#### **Camouflage Netting Supports**

"Do it the easy way," suggests a report from a *Field Artillery unit*: "Place the cloverleaf end of a 155-mm powder case on the end of a spiked pole of any suitable



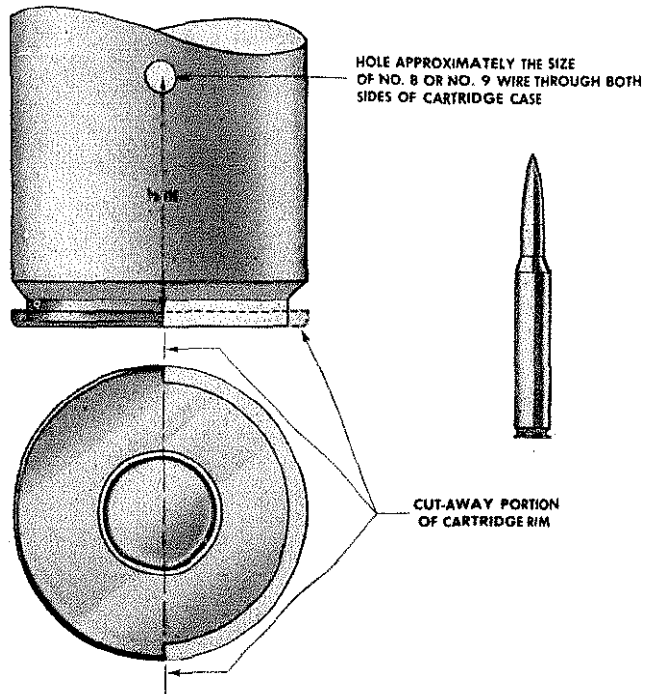
*Cloverleaf prevents tearing camouflage netting.*

height, and use it to raise camouflage netting over the gun. These gadgets prevent the poles from tearing the net and allow easy handling of the netting."

### **Replacing M1 Firing Pin**

*T/5 Arthur Hoskins, rifle-company armorer, 2d Armored Division,* reports a simple and quick method for replacing broken M1 firing pins without removing the bolt or running a chance of losing the ejector: "Drill a hole the size of No. 8 or No. 9 wire through both sides of a .30-caliber cartridge about  $\frac{1}{2}$  inch from the base. Remove the powder through these holes, and then detonate the cap, leaving the bullet in the case. Drop perpendiculars from the holes to the rim and cut away that portion of the rim between the perpendiculars on one side only.

"Place the modified cartridge in the rifle with the rimless side opposite the extractor, and with one hole facing up. Insert a 2-in. pin through the holes and allow the bolt to go forward until the pin catches on the receiver. This operation pushes back the ejector and releases the extractor, which is then removed. At this point the firing pin has been released. Remove the trigger group and stock, turn the muzzle up, and the broken firing pin will fall out. Insert a new firing pin, replace the extractor, and assemble the rifle."





*In daylight read—at night, count the notches.*

### **Azimuth Indicator**

*Staff Sergeant Scott and Private First Class Goldstein, 66th Infantry Division, devised a novel "azimuth indicator" while on outpost duty in the St. Nazaire sector, FRANCE: "Notch a degree scale along the circumference of the metal disc that serves as a bottom for the large 60-mm mortar-shell container. Orient the disc on a flat, level, wooden surface and secure it firmly. Drill a hole through the center of the disc and into the wood. Insert a stout piece of wire perpendicular to the center of the disc and seat it firmly. Then, notch an open sight into the end of the shorter arm of a fragmentation-grenade handle. In the end of the longer arm, drill a hole just large enough to fit over the wire without binding. Assemble the device so that the longer arm can be moved like the hand of a clock with the shorter arm erect.*

*"Sightings are made over the notch in the end of the handle by aligning the target and the vertical wire. By this device, magnetic azimuths can be read visually in daylight; in the dark, the azimuths can be read by counting the notches in the disc."*



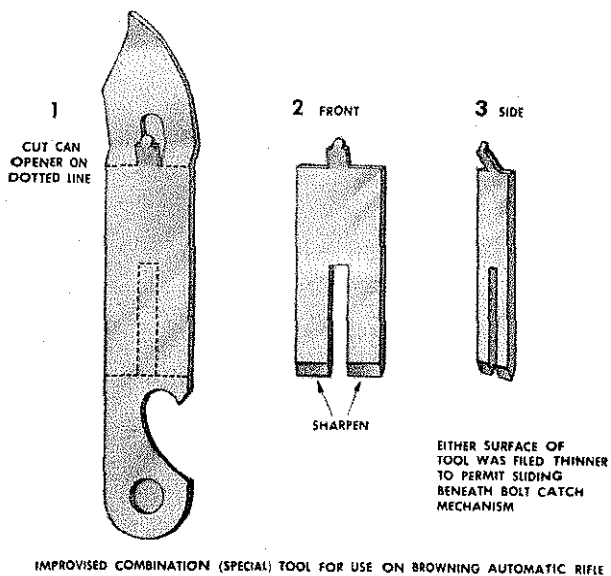
*"And no red points either!"*

### **C-Ration Dessert**

This recipe, reported by *Private First Class Haseltine, Company F, 394th Infantry*, is alleged to produce a much-appreciated facsimile of chocolate or lemon pudding: "Add enough water to crumbled C-ration bread units to make a pudding-like consistency. Heat the mixture, add cocoa powder or lemon juice 'to taste,' and Presto! you'll have a dessert called 'Doughboy's Delight.'"

### **Removing Bolt of BAR**

*Sergeant John A. Duka, 142d Infantry, 36th Division*, has found that a tool made from a combination beer-can and bottle opener removes the bolt of a Browning Automatic Rifle quickly and easily and can also be used to remove the extractor from the bolt either before or after the bolt has been removed from the rifle: "Insert the forked, sharpened end of the tool beneath the bolt release catch, pushing all the way under the depth of the tool forks; then pull back the bolt handle. Use the op-



posite or hook end of the tool for removing the extractor from the bolt. These two operations can be done much faster and more easily with the tool than by use of the old 'empty cartridge' method."



## AMMUNITION - CLIP CARRIER

This ammunition-clip carrier was designed by T/4 Pierce S. Priest, ETO, for use with 30-caliber carbine M1. When carrier is fully loaded, the exhausted clip is removed in usual manner and a fresh clip placed in position for insertion by pressure exerted with fingers of left hand at front of carrier. When carrier is partially loaded, operation is the same except that fingers of left hand are inserted at side of carrier.

**NOTE:** A 30-round magazine for the carbine has recently been standardized. This improvisation is an interim measure to use magazines now on hand.



Empty magazine has been removed preparatory to sliding full magazine into place



# Jap Tricks

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## Don't You Believe It!

After experience in the WAKDE-SARMI operations, an officer in a *Field Artillery Group* reports: "The Japs synchronize their mortar and artillery fire with our artillery to make our troops think our artillery is falling short so that we will cease firing. They have used these tactics at least 12 times on this operation, and so far as is known they have been successful every time."

## When in Doubt—Shoot!

The incident here recounted by an Australian officer after action in NEW GUINEA points its own lesson, epitomized in the title:

"After one sharp action on the coastal track near North Hill, two men and I went out to examine a group of five enemy dead lying some 15 to 20 feet from our machine-gun post.

"As we reached the group I noticed one, an officer with his eyes tightly closed. While this fact seemed a bit strange, I did not fully realize its implications until my corporal said, 'These men seem very warm, sir'—at which they all came very much to life.

"I shot the two nearest me with my Owen Gun. The corporal also accounted for two, but was on his knees, having been wounded in the back. I was just in time to

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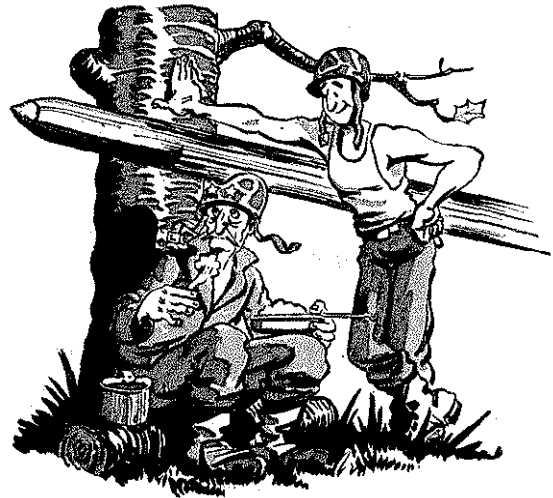
dispatch the fifth Jap, who was lunging at the corporal with his bayonet.

"The corporal subsequently died, and though we killed five Japs at a loss of one of our men, this taught me the lesson of 'Shoot first—examine afterwards!'"

### Watch the Japs on This One

From ETO: "In a defensive position, we had our kitchen about 600 yards from the front lines. Hot meals were served at 0600, 1200, and 1700. The enemy soon caught on and shelled the area regularly at mealtime. Meal hours near the front are now staggered."

*Now that the Japs are giving more attention to the use of artillery they may adopt this German trick if we give them the chance.*



*"Reckon we'd better stagger our meal hours a mite more, General."*

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