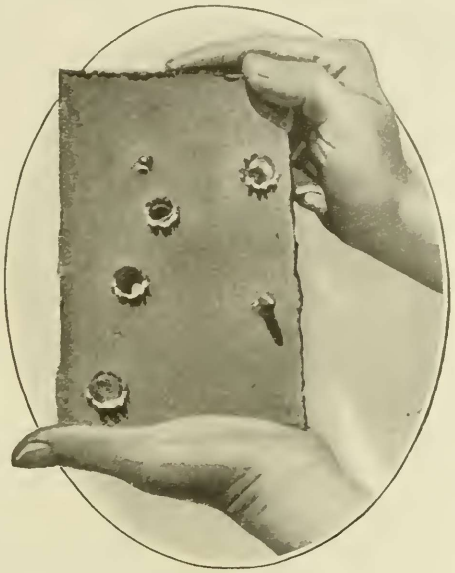
Bullets That Shoot Through Steel

Medieval armor was revived, but it now bids fair to become once more obsolete

A BRITISH sniper lay behind his shield of quarter-inch hardened steel at the Ypres salient and smiled when a bullet from a vigilant German sniper crashed against the protection. He knew that nothing less than a couple of shells from some far-off field gun could bother him. When the next shot came, the smile faded from his lips. After dark he crawled painfully back to his trench-line, shot through the left shoulder. In the shield, which would turn a bullet at the very muzzle, there was a neat round hole, less than one-quarter of an inch in diameter and therefore smaller than the service bullet of the German rifle. From the shoulder the surgeons took the missile, a bullet made of solid steel, boat-shaped, with sharp point and tapered tail, and harder than glass. From other bullets of the sort, fired by the Germans for special occasions, the British were able to reconstruct the whole bullet.



Effect of Armor-Piercing Bullets

The revival of medieval armor as a protective measure has been one of the interesting sidelights in the present war. The first serious adoption was the steel shrapnel helmets, and since that time armor has been used more and more. Now, however, means have been discovered to pierce it and it would seem that it is about due to be once more relegated to the limbo of obsolete things. What will the next revival be?

Inside the German bullet, with its customary mild steel jacket—instead of the copper-nickel jacket used by the Americans and British for the same purpose—and inside a coating of lead, there lay a miniature bullet of steel, which the surgeons took from the sniper's shoulder and which had gone through the supposed bullet-proof shield.

Fired from the Mauser rifle of the German, the mild steel jacket and the lead covering of the steel bullet inside, yielded enough to take the rifling of the barrel, and the bullet flew through the air like any other bullet. When it struck steel, the leaden covering, and the thin steel jacket supported the steel point of the bullet within for a short instant, then they spattered into a spray of molten lead and fragments of jacket, and the steel bullet traveled on alone through the steel plate.

This is the principle of the armor-piercing bullet that is coming to be so common among the fighting armies of the world.

The corresponding American bullet is the Clay, invented by Captain W. L. Clay of our Ordnance Department. It is superior to any of the armor piercers made abroad. Through the construction of its point it will not glance off even the most inclined hardened steel surfaces, for armor surfaces are sloped when possible, to avoid a direct hit on the armor, and to make the bullet glance off harmlessly.

The Clay bullet has the jacket cut away for the last eighth of an inch at the point, exposing the soft lead. This in turn smashes down on striking, changing the shape of the point and making the bullet "bite" on the hard, inclined surface. Then the hard steel bullet within comes smashing through, while the lead and the jacket fly off in spray and fragments, their work done. The actual killing or wounding is done, of course, by the little steel bullet inside of the ordinary one.