

is valuable. The first of these weapons turned out by the Krupp shops was of 11-inch bore, and it was known as the 11-inch howitzer. When it was fired the recoil was so great that the gun was torn from its position and hurled 100 feet away, where it buried half of itself in the earth. Ordnance experts of the German army, constantly on duty at the Krupp plant, accordingly set themselves to work to find an effective method of reducing the recoil. Their efforts finally produced a pair of hydraulic tubes, which were placed along the barrel of the gun. A mixture of glycerine and water was prepared for the tubes, and the barrel of the gun was fitted to them in such a manner that the recoil was taken up by the glycerine and water as it was forced through a series of vents inside the tube the instant the gun was fired. Gravity forced the mixture to flow back to its first position after the recoil had been entirely taken up, where it was ready to absorb the shock of the next shot.

The recoil eliminated, vast possibilities were opened. The calibre of the gun was increased by three inches. With a 14-inch bore the gun was also a success. So the bore was increased again. It then measured 16 inches—that is to say, the diameter of the inside of the barrel was 16 inches. But the rifle and its attachments were so heavy (they weigh forty tons) that every time it was moved on its carriage, when the ground was damp, the wheels sank in several inches. Prior to that time an officer in the Italian army had invented what the world now knows as caterpillar wheels. These were placed on the heavier pieces of field artillery belonging to the Italian army in order that the gun might be moved over swampy land. The Germans accordingly adopted the Italian plan, and made caterpillar 'feet' that could be attached to the wheels of carriages made to transport the big siege guns.

The 16-inch gun, as it is now employed by the Germans is usually fired at an elevation of from 15 to 65 degrees, the projectile shaping a curved course through the air to its target. Projectiles fired from these guns are of two different weights. One variety, the most highly explosive, weighs 2000 pounds, while the other, which contains more steel and less explosive, weighs 2600 pounds. These projectiles, too, are made at Krupp's. The Government pays £194 for each one delivered. Elaborately equipped with range-finders, pointers, sights, and a number of other devices to aid the gunners, the siege gun can hurl a projectile accurately at a target twelve miles away.

The Science of Aiming.

Quite a large part of the Krupp plant is devoted to the manufacture of projectiles. They are made of crucible steel, and are for guns and rifles of various calibres. They are cast and polished, and by the time they leave the plant they are complete in every detail. It but remains to place the explosive in the nose of the shells before they are ready to be fired from the guns, not only of the army, but on the ships of the navy. In action these shells manufactured by the Krupp's are effective in different ways. As an example, the shells from small-calibre guns are of practically no value against fortifications. When they strike they will either bounce off the sloping sides or dash themselves to pieces. The effect of shells from the siege guns differs, according to the angle at which they are fired. The idea in elevating the guns to an angle before firing them is to have the shell come down on top of the fortification at which it is aimed. When this is done the ton of steel will drop through the armor and explode.

Dependable Workers.

The workers at Krupp's are without doubt the most contented in the world. Strikes have been unknown. A strike of any duration there prior to the outbreak of hostilities in Europe would have meant to Prussian militarism a disaster that could not be equalled. Hence the wage and pension systems are exemplary. A strike there now is practically an impossibility, so elaborate are the precautions that have been taken to keep all departments of the plant in full operation twenty-four hours a day and seven days a week.

The House of Militarism.

Regulations governing the Krupp plant and its workers are as strict even in times of peace as those of a military encampment during war. Visitors are allowed in parts of the shops only if they are known. To some parts of the plant visitors are never admitted. Army officers are assigned to the plant as they would be assigned to the army post. The agents of the concern scattered throughout the world are generally officers in the German army. Militarism and the name Krupp are nearly synonymous.

In 1910 there were just 66,000 men working at Krupp's. A year ago these figures had been increased by nearly 7000. A week before Germany's first declaration of war the number of men in many of the shops was practically doubled. Prior to the war the greatest increase in the number of employees was in the five years from 1905 to 1910, when the figures jumped more than 20,000. From 1893 to 1910 the force was increased by more than 40,000 men. From 1900 to 1903, when there was absolutely no possibility of Germany going to war, the force was decreased by approximately 9000. The gathering of a tiny war cloud over south-eastern Europe caused the re-employment of the men who had been laid off.

Resources.

Krupp's own three coal mines near Rochum. Last year 3,000,000 tons of coal were consumed at the works at Essen. A controlling interest in ore is also owned by the company. Krupp's make other things besides armor, guns, and projectiles. A gigantic ship-building yard at Gaarden, near Kiel, is theirs. In addition, there are the engineering works, formerly at Tegel, near Berlin, but now moved to Kiel. Although the Krupp concern makes articles of all descriptions, its success depends primarily upon orders for armaments. Disarmament of Germany undoubtedly would be a deathblow to Krupp's. Incidentally, it would take employment from 100,000 men, and food from another 100,000 women and children. There are no friends of disarmament in Essen, Germany.

Gisborne

(From our own correspondent.)

May 1.

The Rev. Father Lane, who had been visiting the outlying portion of his extensive parish, returned on Monday.

The Hibernians met in St. Mary's School on Sunday afternoon to bid farewell to Bro. W. Haughie, who is going to the front. Congratulatory speeches were made, and a splendid travelling rug was presented to him as a token of esteem. Bro. Haughie is the second of his family to enlist.

The Children of Mary held an enjoyable social evening on Tuesday in honor of Miss Elsie Cassidy, in connection with her approaching marriage. A handsome autograph album and a statue of the Blessed Virgin were presented to Miss Cassidy by Miss L. Doyle, on behalf of the confraternity.

SYMPATHY.

If there is one person who deserves sympathy it is surely he who suffers from chronic colds. A sudden change in the weather or going out into the night air from a heated room, is quite enough to bring on the trouble. Usually the tendency to catch cold is due to a generally run-down condition, and the treatment should take the form of a tonic like BAXTER'S LUNG PRESERVER. It is pleasant to take, gives sure results, and is quite harmless; for children and adults you cannot find a better cough or cold remedy. 1/10 a bottle from all chemists and stores, or by post direct.

—J. BAXTER & Co., CHRISTCHURCH.