

ing. A stringed orchestra is playing above the splash of a fountain and the high chatter of voices. On Clark Street a hundred saloons glare with light and warmth. Each to his own.

Against a few low drifting clouds the yellow glare of the steel-mills flickers and disappears. The

moon has risen above the lake; cold and clear, it touches the barren waste of the park. Yellow shine the lights of the boulevard. Taxis and scattered motors and stray couples, hurrying somewhere, pass and are gone.

JOSEPH HUSBAND.

The German Losses

WHEN I was at the front at Dannemarie in Alsace last June, I asked the usual question of the commander of that sector of the French line, General Legros, "How long do you think the war will last?" His reply, as I remember the words, was this, "Il faut les tuer tous."—They (the Germans) must all be killed.

As it is the opinion—in which I share—of a great many men, soldiers and civilians, that the Allies can only defeat the Germans when the Germans have suffered sufficient losses on the battlefield, the statistics of those losses are of considerable interest. These statistics and their analysis I owe in main to "F. F." the military critic of the *Journal de Genève*.

According to the German census of 1910 (*Statistisches Jahrbuch für das Deutsche Reich, 1914*), that portion of the male population of the country born between the years 1870-1895 inclusive, and reaching the age of military service between the years 1890-1915 inclusive (*viz.*, of ages from 20 to 45 in 1915) was as follows:

(1) Active list	
Born 1888-95 inclusive	4,870,820.
(2) Landwehr	
Born 1876-87 inclusive	5,996,876.
(3) Landsturm	
Born 1870-75 inclusive	2,485,668.
Total available for army up to and including the year 1915	13,353,364.

From this the following deductions must be made:

(1) For deaths between April 1, 1910, and August 1, 1914.

The average rate of deaths in Switzerland for men between 20 and 45 is about 9 per thousand per year. In four years and three months that would amount to about 38 per thousand. To be on the safe side, let us call the German rate of deaths 33 per thousand. This would account for 450,000 deaths, from April 1, 1910 (the date to which the census was compiled) as far as August 1, 1914 (when the war began).

(2) Deduction must be made for those men rejected by the army as unfit. German recruiting figures are as follows:

Fit	55.5 per cent
Fit (2nd class)	24. per cent
Adjourned as unfit	14.3 per cent
Unworthy2 per cent
Absolutely refused	6. per cent

The question now arises what figure must be deducted for those who become unfit between the ages of 20 to 45, in addition to the 6 per cent refused as unfit at the age of 20. No German statistics being at hand, "F. F." falls back on Swiss statistics, and using these as a basis, adds 19 per cent to the original 6 per cent, thus coming to the conclusion that about 25 per cent of the population of Germany is unfit for military service between the ages of 20 to 45.

Using these figures we must deduct 25 per cent of 13,353,364—say 3,340,000 men.

(Note: The 19 per cent which "F. F." deducts is by no means an arbitrary figure. He finds that 2 per cent is retired in Switzerland during the time of the service schools, and declares that in spite of Switzerland's well known record for good health, it is never possible to maintain 75 per cent of the male population fit for military service. A deduction of 25 per cent for the Germans is not high).

(3) There must also be deducted those serving in the navy (150,000), the government railroads (740,000), telegraphs and postal service (320,000), government clerks, police, munitions workers, coal miners, etc. "F. F." calculates this whole number at 1,800,000 men. Therefore, from the total male population available on August 1, 1914,—13,350,000—we must deduct:

(1) Died	450,000.
(2) Refused or retired as unfit	3,340,000.
(3) Public service	1,800,000.

leaving at Germany's disposal at the beginning of the war 7,750,000 men. Now we come to the losses.

The official German report, dated July 31, 1915, issued in September, gave losses as follows:

309 Prussian lists (including Baden)	1,740,000.
715 Lists of other German States	900,000.

2,640,000

A glance at these figures will show that either the Prussian losses ought to have been more, or the Saxon, Bavarian, Württemberg losses less, since Prussia and Baden include three-quarters of Germany's military strength. However, let us pass the government figures; less 33 1-3 per cent slightly wounded and returned to duty, we have definite, final losses of 1,760,000 men for twelve months, or 146,666 men a month.

From another source "F. F." estimates the German losses at 2,400,000 men, exclusive of 700,000 men returned to the front, or 200,000 losses a month. From still another source the estimate is 135,000 losses a month.

Personally, I am inclined to calculate the German definite losses at about 150,000 a month, including navy losses, prisoners, and deaths from all causes in the army. At any rate, according to their own reports 135,000 a month are the minimum German figures, and I prefer the estimate of 150,000. At that rate, up to November 1, 1915, the Germans have lost 2,250,000 men in fifteen months. They should therefore have on that date 5,500,000 men at their disposal, as against 7,750,000 on August 1, 1914.

Their armies, including guards of communication, on all fronts are estimated by "F. F." at about 4,000,000 men. This leaves 1,500,000 men still available for making losses good, a force which would be used up, at the rate of 150,000 men a month, by September 1, 1916. But adding to this force the class of 1916, about 520,000 men (650,000 less 25 per cent for death and disability), the Germans can continue at their present strength until the campaign of the year 1917, which may see the

beginning of the phase of "résistance désespérée," as "F. F." puts it.

"F. F.," relying on the more sanguinary character of the war as it is now being waged, relying also on the lower quality of the last German reserves, believes that the early summer of 1916 will mark the beginning of that phase. Kitchener once said that the war would last three years. A statistician on an American trade weekly devoted to the interests of oil, using Civil War figures, came to the same conclusion. (Incidentally he said the oil wouldn't give out). At any rate, there is reason to believe that the only resources which Germany cannot apparently replace—the resources of men—are not inextinguishable.

This war is not going to be settled in the Balkans or on the Suez Canal. It is probably going to be settled in Belgium, where it began, or perhaps on the River Rhine. And I think the English are the ones who will finally settle it. For France, Austria and Russia are losing men in a proportion not greatly different from Germany. Great Britain's losses alone, immense though they are, are infinitely less (about 500,000 to October 1, 1915). Slowly and stubbornly, but thoroughly and bravely England is learning the art of modern war in the hard school of experience. Her forces are intact. The morale of her armies is serene and strong in the face of blunders, as it has ever been. Is it too much to hope that a Marlborough or a Wellington will rise again? Is it too much to hope that in 1916 or 1917 the mettle of her advancing troops will be felt again on the battlefields of Ramillies and Malplaquet and Waterloo?

GERALD MORGAN.

VERSE

In Church

High on the altar candles stand
And lift aloft their lights to Him;
The altar candles' lights are dim,
I see them glimmer through my hand.

Outside the fierce white sunlight throws
Its strength upon the colored glass,
And strives in vain to break and pass
The barrier of blue and rose.

The choir boys all stand and sing,
Their voices rise, their voices fall,
And high above them on the wall
The blurred and broken sunbeams cling.

Those beams that once were pure, instead
Are daubed and colored by the saint
That smiles down in her glass and paint
From the arched window overhead.

If this, then, be a place for prayer,
I pray you, saint, relax your smile,
And though but for a little while,
Take the red halo from your hair.

Drop your blue robe down to the floor,
And all in white step to one side,
Then fling your gaudy casement wide,
Like the great portals of a door.

The surging sunlight in will press,
Like joy, like strength, like a grand hymn,
The puny candles, grown more dim,
Will vanish into nothingness.

ALICE DAMROSCH PENNINGTON.