

Ferdinand Staked All

On Victory of Germany,
And He May Have to Pay

WASHINGTON despatch says that Ferdinand of Bulgaria is not at a German spa for his health, but is held there virtually as a German prisoner. Stranger things have happened than this. Ferdinand has a reputation. Berlin knows that his word of honor is worthless and that no promises he makes can be trusted unless he is under lock and key.

The Germans bought him for cash and have kept him under surveillance ever since. In Sofia he was surrounded by German officers. Von Mackensen was sent to command his armies. While Germany was overrunning Russia, crushing Serbia and humiliating Roumania Bulgaria was satisfied with Ferdinand's bargain. She looked forward to acquiring Macedonia and the Dobruja and to becoming the leading Balkan state. Her soldiers under von Mackensen made the conquest of Wallachia possible.

But when Roumania, crushed and deserted, had to make peace with the



KING FERDINAND.

Quadruple Alliance, Germany gobbled the Roumanian spoils—the railroads, the oil and mineral resources and the Black Sea ports—and left Bulgaria and Turkey to quarrel over an eventual reversion to them of the scraps from people grew indignant. They upset the Government and clamored for an immediate liquidation of Bulgaria's claims. Germany couldn't liquidate them without increasing Turkey. Ferdinand's position became highly uncomfortable. Being familiar with his propensities, his German entourage probably thought that it was time to get him out of Sofia and to intern him somewhere where he couldn't try to sell out to the Allies.

Ferdinand used to call himself "Ferdinand the European." There are no Europeans in Germany for him to consort with. There are no Europeans outside of Germany who want to consort with him. He is an outcast, an Ishmael. The Turks hate him. The Austro-Hungarians despise him. The Germans imprison him.

Now he is a hostage. But what would Bulgaria pay to redeem him? Probably nothing. He has brought her to the brink of ruin. To save her own skin she would leave him marooned in his German watering place and auction off his empty throne.

Josh Billings' Sayings.

The truth is Josh Billings (Henry Wheeler Shaw) fairly bubbled with the rugged humor of Lincoln, the country lawyer and politician. His sayings had all the dryness and quaintness of those attributed to the "railsplitter." Many would insist upon finding something Lincolnian in such observations as:

Kontentment kan be cultivated a little, but it is hard to acquire.

When a man gets perfectly kontented, he and a clam are fust cousins.

When a man is thoroughly kontented, he is either too lazy to want ennything, or too big a phool tew enjoy it.

If a man kan't laff there is sum mistake made in puttin' him togeter, an' if he won't laff he wants as much keepin' away from as a bear trap when it is set.

In konklusion, I say, laff every good chance you kan git, but don't laff unless you feel like it, for there ain't nothin' in this world more hearty than a good, honest laugh, nor nothin' more hollow than a heartless one.

Silence is still-noise.

One of the hardest things for a man tew do, is to keep still.

Silence never makes any blunders, and alvuz gits as much credit as is due it, and oftimes more.

It is a safe kalkulation that the more praise a man is willing to take, the less he deserves.

There are people who don't do anything but watch their symptoms. I have seen dogs akkt just as sensible; I have seen a rat terrier watch the symptoms ov a knothole in a board fence all day for some rat to cum out, but no rat didn't cum out.

Heels vs. Head.

"I suppose she is head over heels in love?"

"I think it is a case of heels over head this time. She's engaged to a tango fend."

LITERATURE OF TRENCHES.

Old Idea of Glory of War Has Changed.

Four years of war and the absorption of the whole manhood of the nation in the army have given us a class of literature hitherto unknown, writes Capt. Hugh B. C. Pollard, an English writer. In the early days of the war, when excitement ran high and both causes and results were still obscure, those who could write wrote little, for they were too busy learning their new trade of soldiering to have time for the pen, and the torrent of new emotions and new standards of proportion swept away all preconceived notions of war.

As things settled down and the war took its normal place in men's perceptions, those who were writers by nature began to unburden themselves of their thoughts and feelings upon this great new experience of war. The term soldier-poet or soldier-author has outlived its real meaning, for today all men are soldiers; but at least it implies that these men write of something they have personally witnessed or experienced. In the past, the greatest epics of war were written for the most part by men who were unacquainted with camp or battlefield. Thus the writings of soldiers during this war are something apart from any previous descriptions of battle; for in none of them will you find any of the traditional pomp and magnificence of war.

Prose writers and poets reveal precisely the same sentiments and emotions. The prose writers paint their pictures of modern war with all its bitter realism. They dwell, too, on the better side of war; its heroisms, the little daily incidents of cheerfulness, kindness, and self sacrifice; but nowhere will you find a spirit of militarism or of the magnificence and power of war. There is no echo of the Prussian sentiment that war is good, healthy or fine.

In the same way the poets sing not of the glory of war as did their armchair forbears; but rather of its harshness. There is no expression of hate save that of war and its authors. Throughout the work of those writers who have had personal experience of war runs a new note—a note of humanity, different from anything that war-prose or war-poetry has expressed in the past. The same note runs through all their work—a realization of the sacrifice they make, a painful memory of dear scenes, and things they love, a real hatred of the wickedness of war, yet a willing acceptance of their duty and a proud joy in the justice of their cause.

Here and there, young men have written verse that will live, fragments that will be grouped in anthologies of later years. Some of them accept the war as a penalty for years of ease, and echo the voice of the priests that hold the doctrine of vicarious sacrifice. The majority seem to accept it as a blind evil, sprung from the perversion of the German mind.

revival has been inspired by the war, signs are not wanting that a new era in literature is at hand; for be it remembered, the writers who write, voices what thousands are thinking and would like to read. The vivid introspections that characterized the literature of the day immediately prior to the war have completely lost their grip, for since that time millions have been face to face with the realities of life. It is the writings of men that have been through the war that hold the promise of the future. Good literature is essentially the work of men who have leisure to concentrate upon their task. In the life of the trenches and amid the incessant physical and mental turmoil of the war, there is small opportunity for any man to put forth his best work; yet some strikingly good work has already been done under these adverse conditions. It is impossible to point to any war writer, in prose or poetry by a soldier, who rings a palpably false note. Possibly for the first time in history succeeding generations will be able to judge the philosophical aspect of this great war as it really is; for its annals have been written, not from an armchair, through a medium of years and second-hand evidence, but from the battlefield itself.

New Zealand Lacks Salt.

There is a marked shortage of salt for all purposes in New Zealand, especially table and stock salt. The price has been increased considerably during the last year, and the outlook does not seem bright for a sufficient supply in the near future.

Last July fine salt was selling locally for \$31.68 per ton, and by October the price had increased to \$65.69 a ton, and at the end of the year, \$80.29 a ton.

The imports for the five years from 1911 to 1915 ranged from 20,250 to 25,275 tons, averaging about 22,162 tons per annum, and for 1915 the figures jumped to 32,298 tons, but dropped to 16,101 tons for 1917.

Of the imports during 1917 the United Kingdom supplied 8,928 tons; Australia, 5,577 tons, and the United States, 574 tons.

It would seem that there is an opening for additional salt from the United States at this time, providing shipping space can be procured and prices met.—Commerce Reports.

Hun Efficiency.

It is reported that in Germany several thousand women—selected for their youth, energy and attractiveness—are learning the Russian language. Their tutors are Russian prisoners, who are compelled to give them lessons. These students are intended to pursue, after the war, the occupation of travelling saleswomen to the Russian markets.

A New Bread.

A highly nutritious bread has been invented by a European scientist, who replaces milk and eggs with beef blood, bleached, sterilized and deodorized with hydrogen peroxide, which itself is a substitute for yeast.

Insects Are Often Useful

THE importance of insects in the animal world is too generally overlooked. More knowledge along these lines is certainly desirable in view of the fact that of the million and more species in the animal world the largest place is held by the insects. Perhaps their significance may be better realized from the fact that the annual loss by insects in the United States is \$800,000,000, compared with an annual fire loss of \$143,000,000. As over against 7,000 deaths per year due to railroad accidents, there are 97,200 deaths each year in the republic to the south of us due to malaria and intestinal diseases, spread by insect carriers. And while in the whole Spanish war only 300 men were killed by Spanish bullets, 5,000 died of fly-borne diseases. Yet in the face of these startling facts and contrary to popular belief, the great majority of insects are either harmless or beneficial to man. For the damage by insects is done by less than 1 per cent. of the species and a large number of the remainder spend their lives keeping those in check.

Although we are able to determine fairly accurately the damage done by insects, it is impossible to calculate the benefits they confer. It is true that certain species destroy \$29,400,000 worth of fruit annually, but the remaining \$147,000,000 worth owes its existence largely to the pollinating of the blossoms by insects. Practically no fruits could be formed without the aid of insects, and in the production of a harvest, insects, especially bees, of course, dwarf into insignificance all modern implements in husbandry. It would be impossible to get a single crop of red clover without the aid of insects and the present scarcity of bumble bees, who usually perform this service, is making itself felt in the smaller crops and lower vitality of the clover seed. The importance in this connection was realized in Australia and the Philippine Islands, which imported bumble bees for the sake of their clover crops. Figs could not be successfully grown in this country until a big pollinating insect was imported from the Mediterranean countries. A great majority of the beautiful flowers depend on insects for the development of their seed, only the inconspicuous ones being typically pollinated.

But perhaps the most valuable beneficial insects are those which function in repressing the harmful insects by preying on them. The services of the dragonfly in this capacity are of the greatest interest and importance. The dragonfly has long been the object of fear and dislike by human beings, owing no doubt to its fierce appearance and rapid, darting motions. Children have been terrified by the superstition that the dragonfly, or "devil's darning needle," would pierce their ears, or sew them shut. Yet the dragonfly is not only harmless to man, but is one of his best friends in that he is the deadly enemy of the mosquito—that pest that is one of the most numerous, widely distributed and persistent of the creatures that menace the health and comfort of man. So much is the dragonfly the mosquito's enemy that he is called the "mosquito hawk"—and anyone who has watched the swift movements and dart at his prey will agree that the name is well given. As both the mosquito and dragonfly are semiaquatic, the warfare between the two begins early in the young of the dragonfly feeding on the young mosquito, just as the adult dragonfly preys on the full-grown mosquito. As serious blood maladias are known to be transmitted by the mosquito, the dragonfly's service to man is no small one. At one time, in fact, it was undertaken to breed dragonflies artificially with the purpose of exterminating the mosquito, but the plan was found impracticable and was abandoned.

Another beneficial insect is the variety of Australian beetle which was used with brilliant success to save the orange orchards of the nation. The so-called "Australian lady-beetle" was fitted against the destructive scale insect which threatened ruin to the orange industry. The beetle exterminated the scale. Parasitic wasps attack caterpillars and sting them to death, laying eggs in the dead bodies of their victims, so that their young, when hatched, may find abundant and convenient nourishment. The wheat midge, so destructive to the grain, is preyed on by several insects. Ravenous two-winged flies seize and carry it away to suck out its juices. But most powerful of its insect foes are its parasites—small, black, four-winged flies somewhat resembling ants. Their young subsist on the larvae and eggs of the midge, and live therein. As the midge increases in numbers, its enemy increases in proportion, for the numbers of the parasites depend on the amount of available nourishment. Eventually the parasite overwhelms the midge. This is illustrated by the fact that often, a year or two after an excess of midges there is a great scarcity of the noxious insect. In the same way the army worm and fruitfully destructive Hessian fly are constantly kept repressed by their parasitic foes.

Following Reveille.

The bandmaster of a certain regiment somewhere near town has a keen sense of humor. After the bugle plays reveille to waken the troops from their slumbers, the tunes selected are "Oh, it's nice to get up in the morning," "Oh, it's a lovely war," and "Who were you with last night?" A varied selection.

SMELTING IN EXCELSIS

Canada's Only Refining Centre



The Great Smelter at Trail, B.C.

ALTHOUGH, as is well known, a world-wide attention was first directed to British Columbia by reason of the discoveries in the late "fifties" and early "sixties" of alluvial gold in the Fraser river and in the streams of the Cariboo district—and for many years a rich harvest was reaped from these sources—mining as an important, basic industry of the Province—and it is now by far the most important industry in British Columbia—was not, fairly launched until nearly forty-five years later; and the building of the Trail smelter in 1896 by that brilliant young American financier and copper king, P. Auguste Heintze, not only made Rossland, whose mines have since produced gold, silver and copper to the value of \$70,000,000 in round figures, but had the effect of enormously stimulating mineral development and the investment of capital in mining in other sections of the province. But Heintze was essentially a business man, and in establishing his smelter was certainly not actuated by philanthropic or eleemosynary motives. It was no part of his plan to operate the smelter for the profit of anyone but himself. Hence although he received a land grant from the Provincial Government as a consideration for the construction of the smelter to afford narrow-gauge railway to afford connection between the works at Trail and the mines at Rossland, and also obtained an assurance from the Dominion Government of a bonus of a dollar on each ton of ore treated, he also took care that the rate imposed on the treatment of customs ores of the mines progressed and it became necessary to market ore of a lower grade average, the margin of profit left to the miners after paying treatment charges became considerably restricted; and consequently the rate in fact was very general when the mines were acquired by the Canadian Pacific Railway, and the rates were at once reduced very materially. It is fair, however, to state that the new owners were in a much better position to undertake to smelt at a lower cost owing to the great cheapening of the fuel following the development of the Crownsnest coalfield. In 1906, the smelter became the property of the Consolidated Mining and Smelting Co., of Canada, which also acquired

at that time the War Eagle—Central group of mines at Rossland, the St. Eugene lead mine at Moyle and other properties, (which since have been further augmented) and the capacity of the plant was greatly increased, so that the undertaking now ranks as one of the largest and most important of its kind in the British Empire. This is attested by the fact that the smelter has treated to date 5,179,307 tons of ore having a gross value of \$94,315,754 and representing 1,778,321 oz. gold, 27,500,350 oz. silver, 458,326,524 lb. lead, 75,047,410 lb. copper, and 23,056,996 lb. zinc.

The site of the smelter was admirably selected having regard to engineering and commercial considerations and requirements on an elevated terrace of gravelly soil overlooking the Columbia river; an only a few miles distant are the magnificent Falls of Bonington, from which the plant derives its power. Moreover, ore can be shipped for treatment to this centre most readily and advantageously from the various localities in both West and East Kootenay, and indeed from much farther afield. In consequence the Trail smelter has become almost a national, if not an international institution, since in recent years it has treated in addition to British Columbia lead, zinc and copper ores, ores from the Yukon, Manitoba, and Ontario, from the United States and from China. From quite small beginnings the works have been expanded until they now cover many acres of ground, and when working at full capacity give employment to 1,600 men, a large proportion of whom are necessarily skilled. In this article it is not proposed to go into technical details, but it may be stated briefly that the main smelting plant consists of from copper blast-furnaces, four lead blast-furnaces, and two 12-ft. basic-lined converters, the product of which is refined locally, employing electrolytic methods. This latter, perhaps, is the most interesting part of the story; and as a national achievement reflects the greatest credit on those responsible for its successful establishment. Before the war the product of the smelter was lead, which was exclusively undertaken at Trail; but all our copper and our zinc, both being by the way essential metals in the manufacture of munitions, were shipped out of the country as matte, or in other unfinished state, to be re-

fined, and then to satisfy our own requirements for these metals in finished or unmanufactured form we re-purchased at, of course, a vastly enhanced price representing the profits of manufacture in a foreign country plus the import duty. All of which was the reverse of good business. But the war, which has had so stimulative an effect on the national energies in general, influenced action beneficially in this direction also; and upon the urging of the Munition Board those in charge of the Trail Smelter set to work with a will, and succeeded after much experimentation in producing refined zinc electrolytically on a commercial scale. The plant now in operation has a capacity of from 60 to 70 tons of spelter daily, and last year produced 10,000 tons of zinc, having a value of \$3,000,000, which, as is stated in an official report, marks "an epoch in the metallurgical history of Canada." So also with the refining of copper, which, before the war was on many sides pronounced to be an undertaking that could not economically be conducted in Canada, but which during the past two years has been most successfully carried on at Trail, the two copper converters installed in 1916 enabling the matte from the copper furnaces that previously had been shipped away for further treatment, to be converted into blister-copper, which in turn is refined electrolytically in a plant which has an initial capacity of 10 tons daily, but which, since has been enlarged to handle twice that amount. Other products of the smelter are copper sulphate, lead pipe, shrapnel, wire, gold, silver, sulphuric acid, and hydrofluosilicic acid. In short, it is now as complete a metallurgical works as there is on the continent, and as such has played a most important and useful role in furnishing the metals needed for munition making in Canada, thus contributing materially to the effectiveness of the Dominion's war efforts. Nor does this complete its record for patriotic achievement. Since its production began it has inscribed the names of something like three hundred of its employees, who enlisted voluntarily for overseas service early in the war. Among these are several members of the engineering staff, all of whom have won distinction for conspicuous gallantry and devotion to duty in the battlefields of France and Flanders.—N. L.

It is fine for cleaning cans - says the dairyman

Comfort Lye

The Judge, He Knows.

"What, you here again?" exclaimed a New York police magistrate when his eyes fell upon a familiar face before the bar. "Why, you're only out of the workhouse," said the magistrate to the man, who was arraigned for striking his wife. "Well, you see, judge," began the prisoner, "we have mice in the house—you know how it is, judge—and my wife set a trap for them. I was going around the room in my bare feet—you know how it is, judge—not thinking of the trap. I stepped on the bait and my big toe caught in the sharp wire noose—you know how it is, judge." "What's that got to do with striking your wife?" "I threw the trap at her—you know how it is, judge—and she didn't dodge it." "No, I don't know how it is. You had been drinking last night." "I had one drink—you know how it is, judge." "Two months in the workhouse—you know how it is," said the magistrate.

Back-Handed Comfort.

"They say men of brains live longer than others."

"Don't worry about that, dear boy; you may be one of the exceptions to the rule."

Gray Hair

Gray Hair is a sign of age, but it can be removed. Gray Hair is a sign of age, but it can be removed. Gray Hair is a sign of age, but it can be removed.

HOW CAMEL WAS PERSUADED

Beast, Resented Carrying Bushman's Teakettle, and Was Led to Believe Rider Did the Work.

In 1896 camels from India were first brought to Australia for general service, says Norman Duncan in his book, "Australian Byways." It was a happy experiment. A herd of more than 600 arrived with their Afghan masters in 1884. It is estimated that there are now 10,000 camels at labor in the dry, back regions of the commonwealth. An Australian loves a horse and respects the sturdy worth of a bullock; he regards a camel, however, with tolerance rather than approbation, and will not employ so outlandish and perverse a beast except to the great advantage of his needs.

"We used to think," said Jerry, the camel driver employed by the author, "that we couldn't get along without the 'Ghans'."

"Surely they know how to take care of camels?" I asked.

"No fear!" Jerry scoffed. "They had a lot of superstitions—like curing a camel with a necklace of blue beads—and that's about all. The government breeds better camels now. That's only

natural; we're white. I don't mean to say, though, that we've bred the devil out of our camels. Sometimes I lose patience with the brutes."

"A couple of years ago I was traveling to the north of this with a train of four pack camels. One morning when I was packing I found that I had forgotten to stow away a billy can (bushman's teakettle). When I picked that little billy can up and made for the nearest camel, meaning to hang it on his pack, he began to double and groan, as if it wasn't his billy can, and he wasn't going to carry more than his share, and what did I mean anyhow by proposing to overload a poor camel that way? So to make things easy I switched off to the next camel. And he began to groan. They all groaned. Not one of them would have that little billy can on his back."

"Well, I was disgusted. Instead of hanging it on a pack I mounted my riding camel, with the billy can in my hands. He was horrified. Goodness, how he bawled! When he got up he was bawling still. Wouldn't make a step! And then I leaned forward and shook that billy can in his face, and that satisfied him. Off he went without a murmur. Why? I reckon he thought I was carrying that billy can."

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