while at present the decimal system is used in all forms of measurement. For example, the French divided their coins—the unit being the franc—into centimes or hundredth parts of the franc, and in like manner the Americans divided the dollar into cents. In 1871 the Germans followed suit by establishing the mark as a unit and dividing it into one hundred pfennigs, and the Austrians likewise divided their monetary unit, the crown, into one hundred hellers.

About 1742 a Dane by the name of Celsius proposed that Réaumur's 80 degrees be replaced by 100 degrees, and the French, who are always prone to accept the most recent method and do not hesitate to change old systems, accepted it at once, and so for a long time the English, in their more conservative habit, followed the earlier German system, the Fahrenheit; the Germans followed the French method; and the French followed the Danish method, the most recent innovation.

There is no doubt that to Fahrenheit belongs the honor of having invented the thermometer; all the essentials of temperature measurement were invented by him, and we shall never forget that he was the pioneer in this field. The later changes are insignificant as far as the essential characteristics of the invention are concerned, though they are undoubtedly improvements, and it is strange that Fahrenheit himself did not anticipate them. If his attention had been called to them he would no doubt have accepted them at once. But he was a professor and a learned man who was out of touch with practical life. His invention was before the general introduction of the decimal system in other fields of measurement, and for scientific purposes it is quite indifferent where the zero is placed. But we must recognize that the improvements introduced by Réaumur and Celsius make the thermometer much simpler and ought to be introduced without quibbling.

We Americans, being very strongly under the influence of English traditions, follow the English Fahrenheit fashion, and it has remained our system to the present day. That America has so long followed the English conservatism is only a sign of our lack of independence. In scientific circles the centigrade system has been in general use for quite a long while. It is time that the United States took the step now being advocated by Mr. Albert Johnson, who is fathering a bill in Congress having for its object the replacement of the Fahrenheit scale of temperature in United States government publications by the Centigrade scale. There is not the slightest doubt that it will ultimately be accepted. If it is not adopted now it will be in the near future, and the rising generation will feel ashamed that we have been so slow in advancing along the path of unequivocal progress.

MR. MANGASARIAN MISUNDERSTANDS.

Under the caption "God and the War," Mr. M. M. Mangasarian, the lecturer of the Independent Religious Society, published the following comments (December 6, 1915):

[&]quot;Question. What are the foremost Christian nations doing at this moment? "Answer. They are engaged in annihilating one another.

[&]quot;Q. Whose help are they invoking in this work of mutual destruction? "A. The help of God.

- "O. You mean each nation is praying to its own God?
- "A. No, they are all calling upon the same God.

"Q. Is it possible! Is every one of the belligerent countries calling upon the same God to fight on its side?

- "A. Except France. The French government refused to sanction official prayers for victory. France, the only belligerent country in which church and state are separate, is the one nation that is not trying to drag the Deity into the war.
- "Q. Tell me, if the Christian powers are asking God to help them kill each other,—then they must think that the Deity wants most of the Christians killed?
- "A. That conclusion seems inevitable. If God fights with the Germans, it must mean the destruction of all the Russian, English, French, Serbian, Belgian and Montenegrin belligerents, which will prove that God wants the majority of Christians killed. If He fights with the Allies, then He must want the destruction of Protestant Germany and Catholic Austria, the former being one of the foremost Christian nations in Europe.
 - "Q. Would that encourage the heathen to embrace Christianity, or to love the Christian God?
- "A. The missionaries say-
- "Q. Never mind what they say. Are the heathen nations killing one another too, as fast as they can?
- "A. Some of them are helping to kill Christians.
- "Q. What pulled them into the war?
- "A. Their association with Christian nations.
- "Q. Explain that point.
- "A. 'Yellow' Japan was compelled to enter the war because of her alliance with *Christian* England; and the "Unspeakable Turk" drew the sword because of his association with *Christian* Germany.
- "Q. Explain also what is meant by 'holy' war.
- "A. When a war is more fierce, more bloody, more indiscriminately and pitilessly cruel, and greedier of victims than usual, it is called 'holy.'
- "Q. Do you mean that whenever religion [religion based upon a supernatural revelation] takes hold of a fighter, he becomes a fiend?
- "A. Yes, the religious wars, Christian or Moslem, have been the fiercest.
- "Q. But do not Mr. Bryan and others contend that religion is the only power that can make the nations love one another?
- "A. Let religion try first to make Catholics, Protestants and Orthodox Greeks cease *damning* one another before offering to teach the nations how to love one another."

It is easy to ridicule the belief in God. It seems to me quite natural that every one who believes in God should call upon him in distress, and, with honest people on both sides of the struggle, this means self-criticism and clearance of one's conscience. If God stands for anything he means truth and justice, and the main thing in a war will ever be to have these on one's side.

Under the date of Sunday, December 26, 1915, Mr. Mangasarian takes the subject of God up again, and this time directs his ridicule against me under the caption "God is Neutral." He says:

"Word comes from Dr. Paul Carus that "God is neutral." In his discussion of the European war the good Doctor says this: "God is neutral; but I am convinced that, being impartial, he will stand by Germany in spite of the odds that count against her." How he got that interesting intelligence he does not explain. And since he does not divulge the name of his informant, nor offer any evidence to establish the neutrality of the Deity, we venture to suggest that he may not only be misinformed, but that he is also in danger of being sued for libel.

"To begin with, neither the Czar of Russia, nor the King of England, nor the three Kaisers, of Germany, Austro-Hungary and Bulgaria, will agree with Dr. Carus that God is neutral. On the contrary these eminent men have information quite as reliable as the Doctor's, that God is pro-Russian, or pro-British, or pro-German. Why are not their assertions as believable as that of the Doctor?

"Again, in all controversies there is a right and a wrong. To say that God is neutral is to accuse him of indifference. Can a God afford to be neutral when truth or right is being murdered? What would a neutral God be worth to the cause of civilization or humanity?

"Once more, if God is neutral is it from inability to know which side is in the right, or from policy? Is he afraid of losing his prestige with the side he decides against? It would be interesting to know the motives which make the Deity neutral. We hope, however, that it is not because he does not care.

"Again, Bible history squarely contradicts the claim that God is neutral. In the wars of the Jews, was God neutral? In those of the great religions, was he neutral? During the French Revolution, or the German Reformation, was he neutral? Why then should he be neutral now when the greater part of his world is tumbling over his head?

"And again, to say God is neutral is to say that there is no God. What is the difference between a God who does nothing, since he is neutral, and one who does not exist? Who would pray to or worship a neutral God? Who would build churches to a being who does not care what happens or who wins or loses? The grass would grow on the altars of a God who is neutral. Dr. Carus himself does not care for a neutral God, for in the same curious sentence he denies that God is neutral. He says: 'God will stand by Germany in spite of the odds against her.'

"But is it not regrettable that a man of the intelligence of Dr. Carus should add to the fog of the mind by the use of so metaphysical a phrase as the one we have quoted from his article in the Open Court? The men who have done more to retard the wholesome progress of thought—of clear thinking and honest expression, than the 'Billy' Sundays, the Moody revivalists, or the popish priests, are the so-called 'liberals' who stoop to conquer. We are sorry to see a man of the parts of Dr. Carus lend his support, even though indirectly, to the cause of intellectual obscurantism.

"Should Dr. Carus favor us with an explanation we promise to print it on this page."

I will make only a few comments on Mr. Mangasarian's caustic criticism: It is difficult to understand how Mr. Mangasarian could misinterpret me. In reading over the whole passage from which he quotes, I find that my meaning is not obscure, and it would have been sufficient if he had quoted my

words in their context. I will here repeat what I said, with the risk that I may again be misunderstood:

"There is an invisible power in this world which may be called destiny, or, to use a vague anthropomorphic term, Providence, or in religious language, God. Frederick the Great used to say that God is not neutral, he is always on the side of the stronger battalions, and that as a rule is true, but sometimes he sides with the weaker against the stronger, as for instance at Marathon and Salamis. God favors the weaker side if it is led by intelligence and, as it were, promises to promote by its victory the cause of mankind. In the present war the Germans have proved themselves worthy of victory not only by their indomitable courage in battle, being ready to conquer or to die, but also by remarkable foresight in making up for their needs by new inventions. In the moment of dire need the busy Bertha appears unexpectedly before the hostile forts, the German submarines accomplish feats of great daring which heretofore could not be accomplished, and agriculture is improved to such a degree as to make Germany practically independent of the importation of cereals.

"God is neutral; but I am convinced that, being impartial, he will stand by Germany in spite of the odds that count against her."

There are probably as many views of God as there are persons using the word, and I hope that my readers know what I mean by the term. God is not an individual, not a creature, not a bodily existence, not an ego entity. God is the All-Being; He is the norm of existence; He is the law and order of the world. Thus He is the directive principle of the universe. He is neither matter nor energy, but that third and more important factor of existence, the determinant. All laws of nature are parts of God; they are the eternal thoughts of God; but among the laws of nature those which constitute the moral world order should be regarded as characterizing God's nature most truly.

I have written a book on God, but Mr. Mangasarian cannot have seen it, otherwise he would have understood what I mean when I say that God is neutral. But being as absolutely neutral as is for instance the law of gravitation, "He will stand by Germany in spite of the odds that count against her." Why? Because the Germans are superior to the Allies in energy, efficiency and foresight—indeed in every respect except numbers; and quality is always decisive, not quantity.

If Mr. Mangasarian were pro-German he would perhaps not have misunderstood me; but he is a native Armenian, hence he is anti-Turk; and the "unspeakable Turk" being an ally of Germany, he is anti-German, and so he does not try to understand me. He believes he has caught me in a contradictory statement, and accuses me of obscurantism. He promises to print in his leaflet my answer to his criticism, but if he does not deem it acceptable I absolve him of obligation.

BOOK REVIEWS AND NOTES.

A remarkable little volume of German war songs, of which Hanns Heinz Ewers is the author, has been published by *The Fatherland* of New York. The first poem represents the Germans as saying:

"We have been silent in the council of the world Once, twice and again.
We stood aside and avoided the deed, Once, twice and again.