

F. W. STOCK & SONS

MILLERS OF
FAMOUS MICHIGAN SOFT WHEAT AND
CHOICE NORTHWESTERN SPRING WHEAT

HILLSDALE
MICHIGAN



Dear Dad:—

Feb. 8, 1932.

Got your letter this morn. Got a letter from Tom this pm., so think I'll dash you off a note — if I don't I don't know when I see will x Also, the better answer it while your own letter is clear in your mind.

- ① Red Sky of Uruia — caused by red component in atmosphere, all x?
- ② Viscous iron sticky? Not necessarily — modelling plastic is very viscous, but not sticky — or probably it is plastic, not viscous. The higher paraffines, however, are truly viscous, and are not sticky. Allotropic iron, I believe, is a purely imaginary substance, but I had pictured it as something less viscous, except vastly heavier, and viscous instead of mobile.
- ③ Can't deep-sea fishes ever get civilized? Maybe not — but I see no inherent impossibility.
- ④ Why couldn't Rodebusch neutralize half of incitio? Principally because I didn't want him to! If he could have, I couldn't have written that gorgeous launching scene, which even Bates says is a pippin! The Uruians could, and did, neutralize part of it, but they couldn't get it all x Two different minds, you see; working differently, and achieving different results.
- ⑤ Speed of ultra-beam — why couldn't plates hold slip? Ultra beam was thousands of times as fast as the first jump of the super-slip — that 2 minutes included all the time lost at the Hill in getting ready to answer, etc — and the picture faded off the screen from lack of power to transmit that distance, not because the slip outran the beam. I don't believe that this point was covered in the first rough draft, but I did clean it up in the second.
- ⑥ Rodebusch floating across slip, inertialless. Good point, Dick, thanks. That is pretty sour — and I think it got past Bates and me both. I'll have to check that up and see what I can do about it — even pseudo sciences should be logical.
- ⑦ Roger's ability to cover distance in 15 days that the super-slip, inertialless, couldn't cover in a lifetime. Roger, an adept of North Polar Jupiter and a lot of things learned since that time, had a lot of stuff that nobody could find out about — (and because he never told anybody anything) and this is one of them. Now, Dick, if this story were really scientific fiction, I would have taken the time to figure out, and would have explained

in detail, a theoretically possible drive for him. But it isn't, and so I didn't. I don't know any more about Roger's stuff than you do. But remember, dear, that this story is not scientific fiction, but is flagrantly and openly pseudo science, with no pretensions to be anything else. It has in it most of the ideas I had that were too wild to use in scientific fiction stories. I tried to be as logical as possible, but it is primarily a story of wild adventures and of real human interest; and when any of my characters wanted to do anything, or when I wanted them to do anything, to highlight that interest, I let them do it, by any sort of invention that would let them do it in the simplest, easiest, and most interesting way. I have made and will make no attempt to justify the science involved; for it is not, in any sense, science at all. It is imagination! I tried to tell a gripping story, with really human characters; and if I have succeeded in that to any degree at all, I am well content.

⑦ That brings us to character drawing. As I said, I tried to make my characters human; and I think that I succeeded to a certain extent with Cartigan and Clio; and, to a lesser extent, with ^{and Cleveland} Bradley. Not so good with Radebush, and hardly at all with Samms. They are, however, minor; and if you can think of Cartigan and Clio as I saw them while I wrote, the story is not a total loss. You say that you "~~disagree~~" "disagree", about Antowdny Stane wanting action, not character drawing. Whether or not you disagree, that is what they want. They don't like, for instance, the bits of slower tempo that I put in "Spacehounds" deliberately, so that the action would come in surges, each higher than the other. Personally, I liked "Spacehounds" better than any other story I ever wrote. It had action, but it moved deliberately enough, and with pauses enough, so that I could build up my characters; and for that reason the characterization in "Spacehounds" is better in general than in "Fuplawtary." Cartigan and Clio are nearly as good, I believe, as Steiner and Nadia (or are they?) but the rest of them are not — they had to be sacrificed to action. But I can't quarrel with Bates on that. He knows what his mass of readers want, and I will say that for sheer ability in writing, Antowdny Stane is putting out the highest general average of any of them, I think.

⑧ The polygenic screen, as developed more or less accidentally by Roger and as used by the Nemans, was impervious to matter because it disintegrated matter at impact. Don't ask me why, either — it simply did it because I wanted it to! I have often wondered about things like that, and there was too good an

to miss to put it into a story. It carries no guarantee, however, either expressed or implied, as to scientific possibility.

Now as to some of your other questions. In using "sub-ether" waves, etc., I am of course using the same concepts I did in "The Skylark of Space" - in ~~text~~ which it was postulated that the ether was a substance composed of discrete particles; the sub-ether was the mass or less mysterious material - or lack of material - which existed between those postulated particles. A sub-ether wave would be a wave in that postulated medium; and could not, of course, effect the ether itself. And as to the defensive screen - I am not at all sure of how it could work, since one has never been invented. However, I cannot prove it impossible, so have ventured to use it, in really scientific fiction as well as in "Injunctary." The effect of any force acting alike upon every molecule of substance would of course act to rob high accelerations of their harmful effects. This follows from the fact that the high accelerations used in my stories would crush the people flat by their reaction - the vessel is accelerating, you see, and the reaction of the mass of the passengers against the accelerating ship would crush them. If, however, every molecule of substance within the hull is affected alike by any acceleration, there will be no relative action between vessel and passengers; hence no crushing effect - similarly, bodily organs would stay in place instead of crushing down or back against the confining or supporting tissues.

You mention again the need of contrast to bring out the full value of the super-science, etc., so I will discuss it some more, too. I agree with you - I like paradox between science and action, too; and I particularly like to read stories whose characters are really brought out - a procedure which is almost impossible in a story in which slow-bang action is the first desire.

However, I can't write stories yet exactly as I want to - maybe, someday, if enough of you fellows keep us writing to editors about us, I will be able to write a story exactly to please myself, and will be able to cram it down their throats (the editors, I mean) and make them love it. But I'm not big enough to do it now!

But really, I am not at all certain that I don't like pseudo-science better than writing really scientific fiction? It's quite a step to go ahead with any kind of situation I can imagine, formal or not - and if I could have gone to about 75,000 words with "Injunctary," I believe that I would have liked it even better than "Spacebombs." Sincerely yours, Doc.

P.S. Forgot something. You say you think inertia is impossible. As long as you stick to "think", you are all right. I think that way myself. But don't say that it is impossible, or somebody will be calling on you to prove it.

And no less a guy than Bigelow recognized, as far back as 1908, that inertia was not a mathematical necessity for the existence of matter. To far, matter has never been observed without it, as far as we know, but someday, somebody may be able to neutralize that factor without destroying matter. And no outrage to the law of conservation of energy would result. Force applied to an inertialess body would give it instantly such a velocity that the friction of the medium would equal the force - or rather, absorb it. In space that would be a terrific velocity indeed ("if" that word - removed faint of authority, "Supplementary") but, it would square up with all present laws of thermodynamics and mechanics.

If you want to check up on me, read Bigelow's "Theoretical and Physical Chemistry," Century Co., 1912 edition, Chapter III (p. 17, et seq), by S. Lawrence Bigelow, Prof. Phys. Chem. Univ. Mich. And there, Dick, was a man quite some years ahead of his time!

~~De~~
Thanks again for that point you brought about inertialess floating. I revised that completely, and it's a honey!