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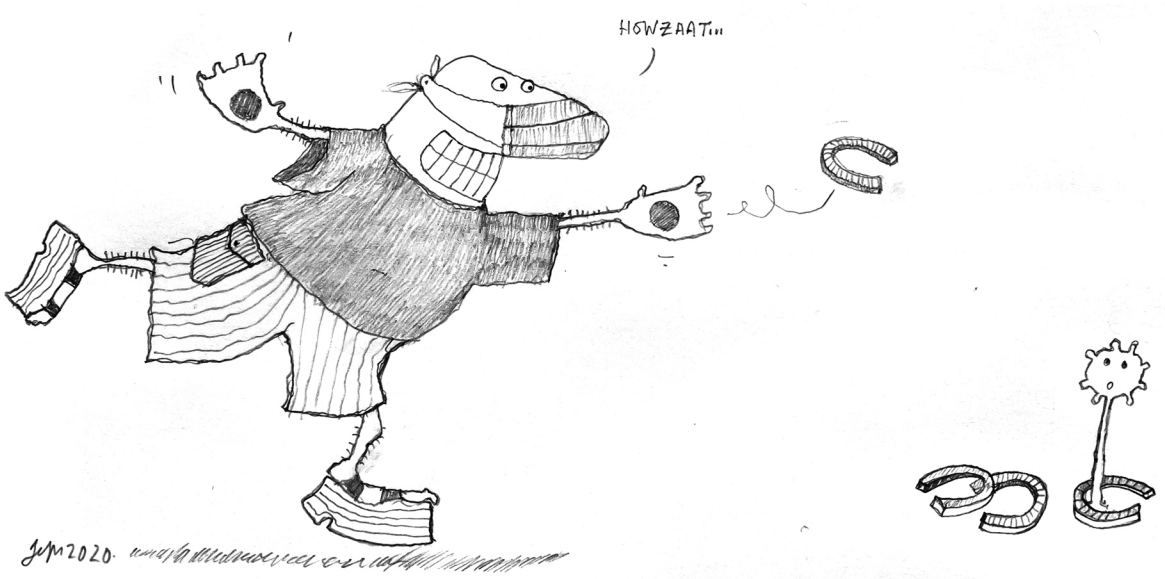
STICKY WICKET

Corona XVI – horseshoes and hand grenades

Mole



Original artwork by Pete Jeffs - www.peterjeffsart.com

G'day mates! And a crackin' good day it is, too! Blue sky, light breeze, and later, quarantinis with friends (virtually, of course!). My friend, Quokka, just sent me a preprint he found, (hence the Aussie overtones) that has some pretty good news about a vaccine, and even if it isn't *this* vaccine, I'm hopeful. And hope is a wonderful emotion. It's one of my favorites, probably in the top five.

My number one emotion, if we're scoring (and why not! It's a great day!) is wonder. I don't mean this in the sense of "I wonder if it is going to rain today?" I mean it in the sense of that state of astonishment that gives you the feeling that there is a deeper reality than the one we experience. I get this emotion from great science, those rare and awesome (in the true sense of awesome, not "Awesome, Dude, you managed to unmute yourself") moments when an unexpected discovery opens a window onto how things might actually work.

I also get this from great magic performances. I don't mean an old guy pulling a string of handkerchiefs out of a hat, or someone who can deal ten pat hands of poker from a shuffled deck, but those performers who make me not even *try* to figure out what they are doing. Letting go of my left brain analytics and letting it wash over me for a little while. As when Teller's hand produces a coin that changes into a gold fish, and then another, and then a large bowl of them. Or when Derren Brown unwrapped a ball of yarn that contained a small box which, in turn, contained a medallion inscribed with the name of Ms. Mole's grandmother (she still has this, of course!). In this way, magic and science aren't so different, when they are done really, really well. Lots of people get close (in both areas) and, like horseshoes and hand grenades, close counts. But wonder only seems to happen when we hit the bullseye.

There are people who work in other ways to instill wonder in others. Here's an example. A taxi driver picked up a man who was distraught that he had lost a napkin with the place he was to re-engage a marvelous woman he had met the night before. The driver sympathized, but ultimately dropped the man at a venue the man knew the woman frequented. After another fare, the driver picked up a passenger who not only fitted the description of the woman, but indeed turned out to be her (out of millions of city residents) and brought the couple together. He experienced wonder. Here's the thing. It wasn't a remarkable coincidence, but instead one of the projects created by the group 'Improv Everywhere' who engineer such experiences, mostly for the joy they bring. A lot of work to produce an emotion. But how often do we try to engineer wonder in what we do? Not by trickery, but by asking, 'what if?' and seeing where that might lead us. Science is hard, and often disappointing (even when things work). Maybe we can step back, especially in these difficult times, and examine if our goals are designed with at least the *possibility* of producing wonder. I wonder.

But, as usual, this isn't what I wanted to talk about. I wanted to talk about horseshoes and hand grenades. As in 'Close only counts in…'. If you don't know what I am talking about, there is an old game that we used to play when I was a molet, involving iron horseshoes that we would throw towards a spike in the ground, often hitting our competitors (they were less enlightened times, when children throwing dangerous objects was 'fun.' We also had a game that used large, sharp darts that we would throw to stick into the lawn, and into each other's feet. That was fun, too. Now we have video games.). In the game of horseshoes, you get points for managing to put your shoe around the spike, but you also got a point for being close. As for hand grenades, I think it is self-explanatory why 'close' counts.

Which brings me back to the paper Quokka sent me. (See what I did there? Don't tell me you saw this coming! I know you didn't.

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Didn't, didn't, didn't. Sorry, I seem to be channeling my inner molet). The vaccine under investigation was engineered into an adenovirus and induced good immune responses in most of the people to whom it was administered. However, many of us already have immunity to this adenovirus, and in those test subjects with such immunity, the desired antibody responses were muted. A bit disappointing. That said, everyone made good T cell responses to the desired target. We'll have to see how protective the vaccine is, but as I said, I'm encouraged. However we look at it, the results suggest we are close. And that's just one vaccine.

And yes, 'close' counts with vaccines. Each year, researchers survey the planet to predict the annual influenza epidemic that will circle the globe (predominantly on the wings of migrating birds, as it turns out). There isn't time to identify, engineer, and manufacture the flu vaccine for each strain that appears, so instead, these researchers get as close as they can, producing a vaccine from a large set of pre-approved bits. In most cases, the immunity produced in response to this 'close' vaccine is either good enough to prevent infection with the actual virus, or at least ensure that symptoms are milder than would occur without vaccination.

We know that we desperately need a vaccine for the virus that has caused this Terrible Pandemic. It seems that we are already close. We absolutely need to ensure that it is safe and effective (there are great risks if we bring it out too soon), but if it is, even partially, 'close' may well be close enough.

And wouldn't that be wonderful?