

# Designing the Velosteam

The velosteam of the Steam Highwayman is really the second ‘character’ of the gamebook: in a word count, ‘velosteam’ appears more frequently than any other noun, despite it being my own coinage. While the identity of the Steam Highwayman should always remain mysterious, I always wanted the velosteam itself to be as well-realised as possible, and as realistic as possible.

Firstly, I spent a long time deciding what I would call the ‘steam motorbike’ that you would ride. ‘Velocipede’ was a genuine Victorianism for the pedalled bicycle or pushbike as we call it where I’m from. While other steampunks have designed similar things and used this name, I wanted to create something distinctive. Thinking like a marketeer - a Victorian one - I wanted to advertised the essential qualities of my creation: its speed and its steam-power. I was playing with ‘pneumo-’ and ‘aetho-’, but in the end felt that I should really come down to earth. The ‘velosteam’ was much clearer and also gave me a dactylic rhythm shared by some of English’s ‘most beautiful’ words: look up what J.R.R. Tolkien said about ‘emerald’ and ‘cellar door’.

Ferguson are of course a maker of tractors, but before making petrol and diesel engine machines they were steam engineers. I wanted a brand name that sounded English, hearty and heavy: the story of engineering in Britain is amazingly dependent on individuals and family firms who invented and iterated with the same diligence and focus that you can still observe in committed hobbyists today.

But the Ferguson velosteam was written about long before it was drawn. At one point I described it as having a ‘spherical copper boiler’ within one of the wheels, inspired by the bulbous boilers illustrated in a Ladybird history of the motor car and the beautiful distilling vessels of whisky refineries. But that reference is gone from the gamebook: I knew that sooner or later, I would be handing over design to somebody who could take the final images of my creation to a level of finish that I could never reach and that meant that I held off being too specific with my design. On the one hand I didn’t want to cramp my artist’s style and on the other didn’t want to be disappointed when he plainly saw things differently to me!

## Brief

### Artwork

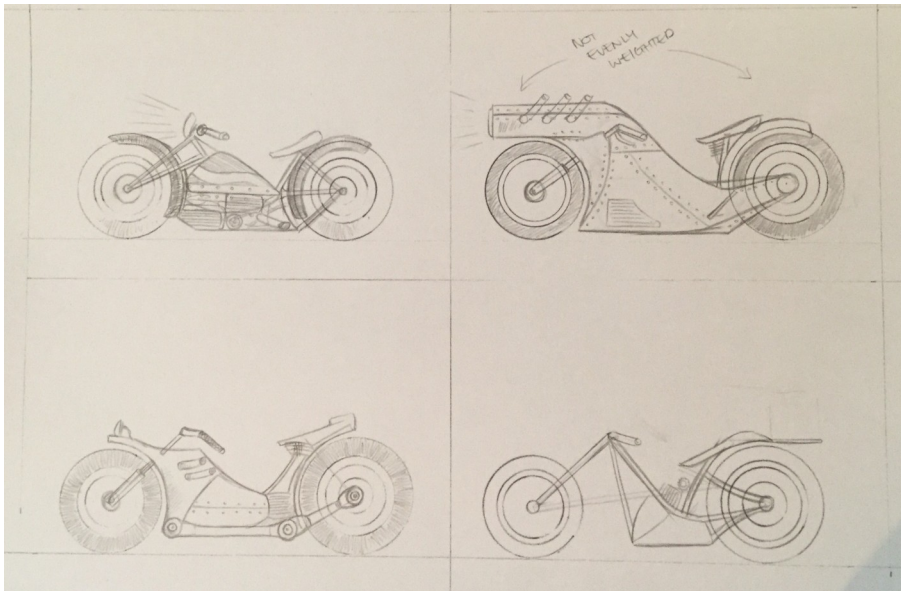
The marketing art needs to be clear, iconic and dramatic. It must function as a visual hook for the project on Kickstarter, KS videos, facebook pages, and print flyers. It should relate to the cover and interior illustration of Steam Highwayman, for example, following the same design of the velosteam. It should work both in colour and monochrome line formats, perhaps with one key image supported by a variety of backgrounds.

I had to collect a whole range of illustrations of motorbikes and steam machinery to create an what I called an ‘illustrative reference portfolio’. Basically, this was an extended mood board that helped me identify what I was looking for and would help my artist, when I found them, understand my vision. While I had clearer mental image of the highwayman, it took me a lot longer to find references I liked for the velosteam.

Essentially, this is because any illustration of motorbikes in exciting poses all remained very ‘petrol shaped’. Wherever I found motorbike drama I was unhappy with the weight of the machine and the way the rider sat on it: when I found heavier machines and fantastical motorbikes, these lacked drama.

This image had many positives: a steampunk aesthetic and good colours, but the tone was far too cheerful and the bike appeared flimsy. The frame-busting composition was something I like and which I discussed with Ben May on our first meeting in Oxford. I note now that this bike has a fairing like our eventual design.





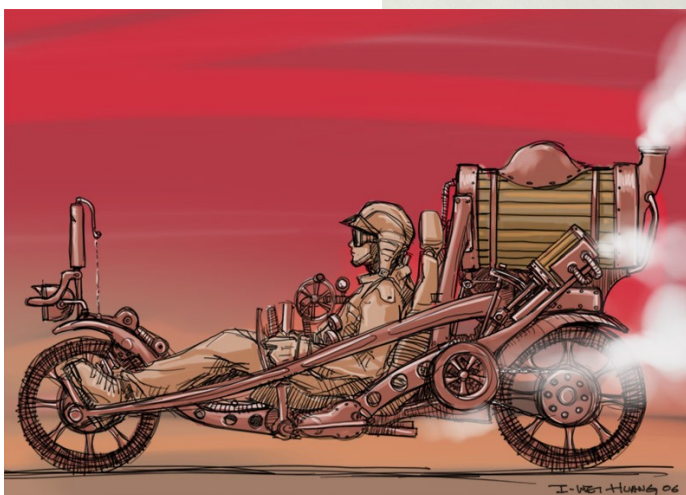
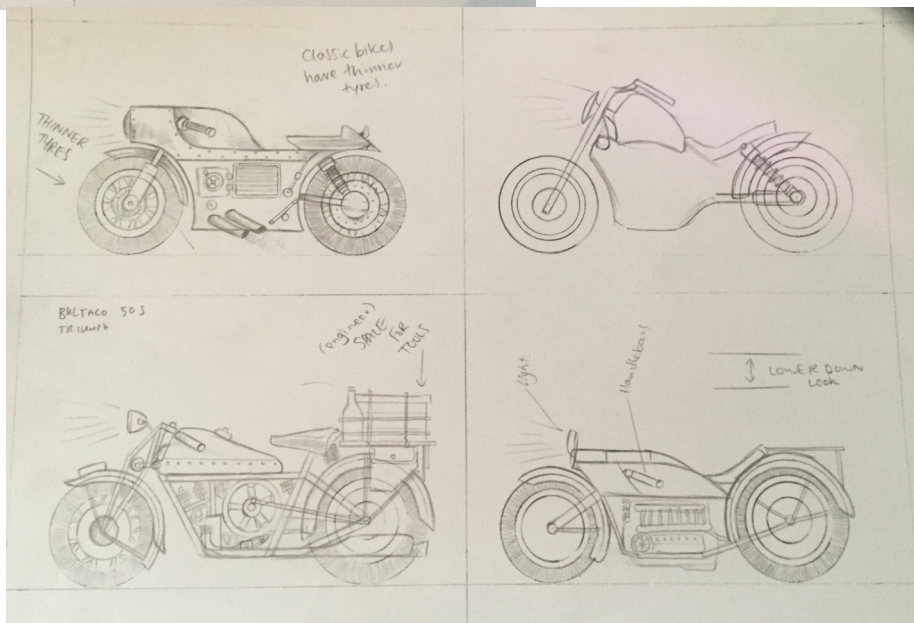
These are the first velosteam designs Ben sent me: not one, but eight different ideas of layouts and shapes! His creativity and thoroughness really impressed me at this stage: seeing these appear in my inbox was a breakthrough for me as a writer, seeing something I had invented in words beginning to have a shape on a page.

Still, we had a lot of work to do to develop and refine the design.

Features I liked in these were the riveting, the addition of tied-on accessories, the variety of original shapes and fairings, but overall we were still too focused on redesigning a petrol bike.

Then I came across a blog post and online tutorial that changed everything: it had been written just for us.

CrabFu of California published an article online called 'How to Draw SteamPunk Machines'. He writes: 'This page is to inform artists who want to draw steampunk machines but don't quite understand how steam works. The focus is to add



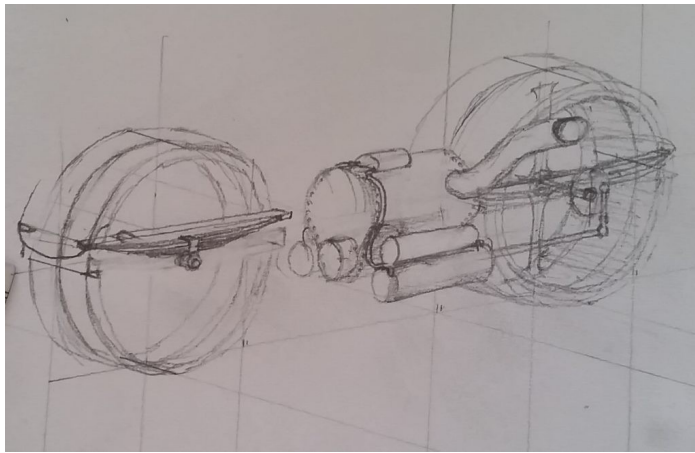
enough elements to your drawings, to make your steampunk machines more believable.'

Crabfu is miniature steam modeller and gives a step-by-step process, simply describing the workings of real steam engines and explaining how understanding these can improve steampunk designs. Many thanks, CrabFu! I shot the link across to Ben, updated my brief and even set to work myself.

This was really the breakthrough for us: we managed to leave behind the sense of a modern, petrol-cylinder engine and needed to consider how to include all the parts of a working steam engine on a two-wheeled machine. In the end, most of these components are hidden under the A4 Pacific-style (or Mallard-style) fairing of the velosteam's long nose,

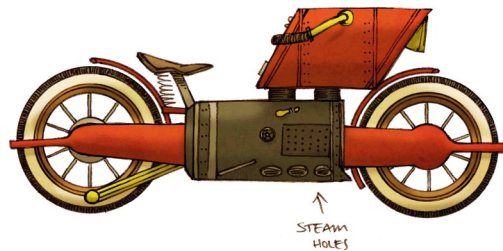
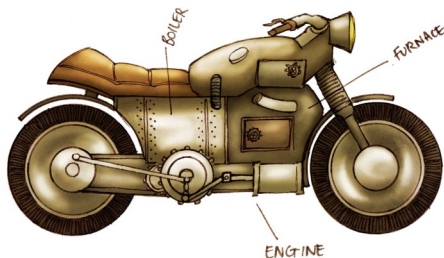
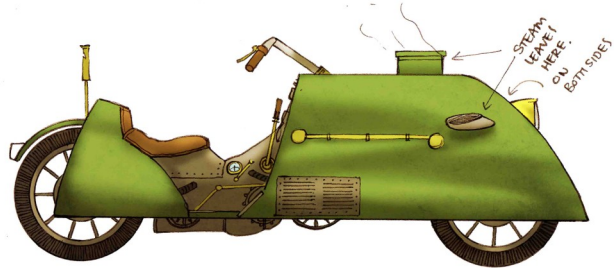
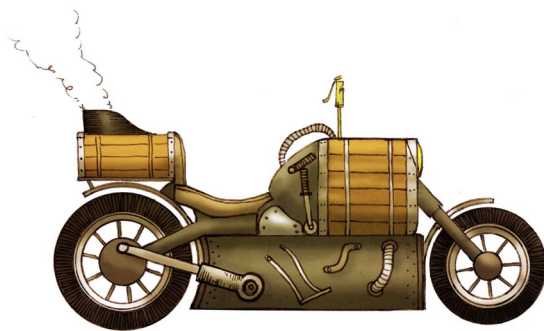
but look closely and you can see many of the features CrabFu points out: a water tank, a firebox, a boiler, pipes between, a lubrication system, pistons and cylinders, vents and even a whistle! The next round of Ben's designs were colourful, focused and, typically multiple!





My designs based on CrabFu's principles are all posted on my blog: I never intended to create something to replace Ben's work, but I wanted to find out for myself what sort of shapes worked with heavy, iron tanks and pipes. It was a great day's drawing as well as very helpful for making my writing about the velosteam clearer.

You can see here the spring-leaf suspension. I had a great hour researching that! Also the condensers mounted directly between the boiler and the pistons, all in a nice isometric view. I was taught some of this at school in Year 8.

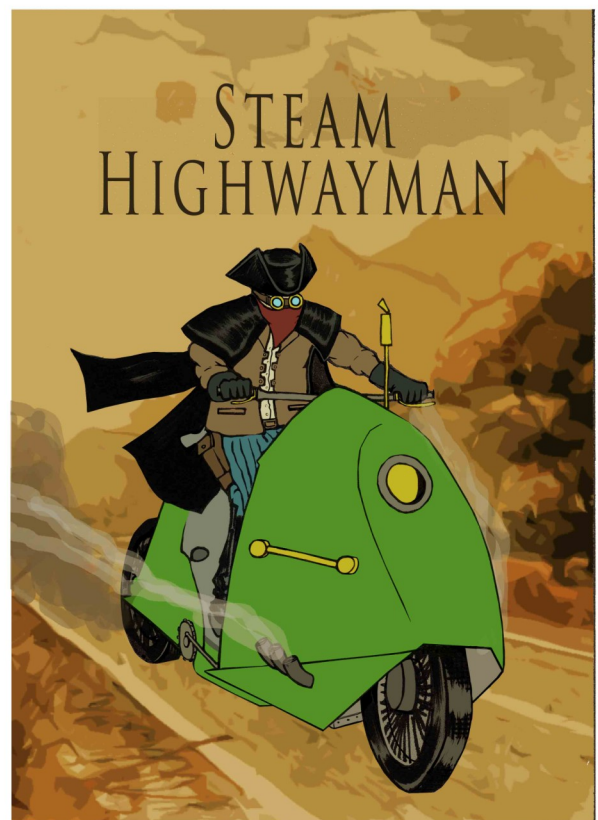
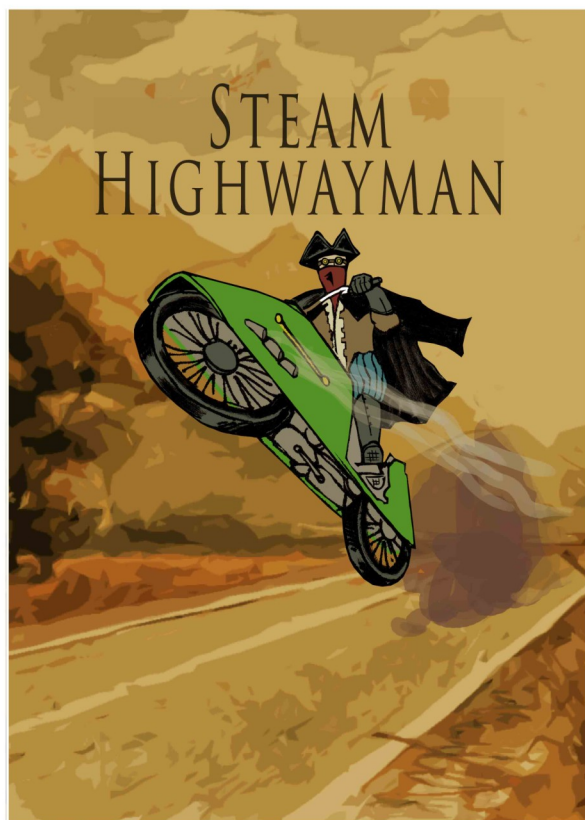
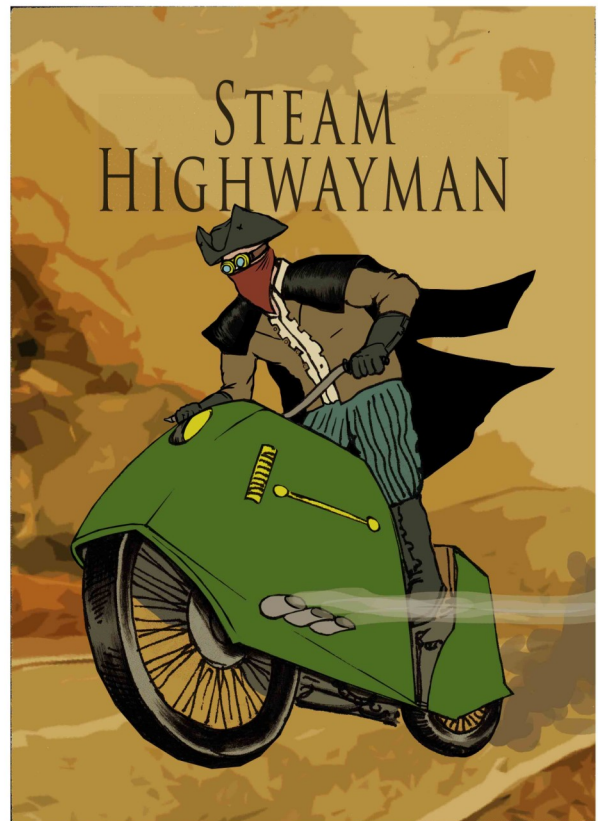
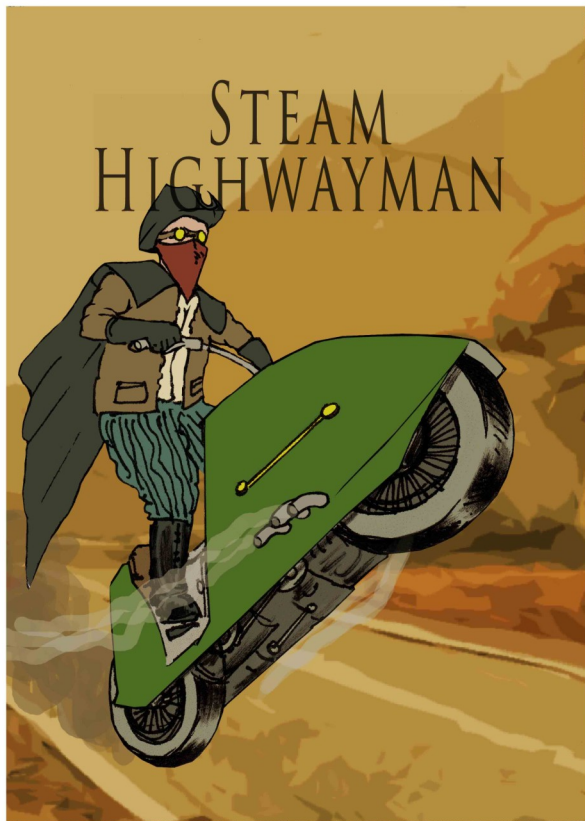


This is what we were now working with. You might spot similarities to CrabFu's work: wooden reinforcements (lovely), which I've actually recently discussed with an engineer at Crossness Pumping station, home to a museum of industrial steam machinery; vents a-plenty, grates, brass-work, driving rods and even a whistle! The colour on these really excited me: I asked Ben why green for the Mallard-style one—he couldn't tell me other than liking the complimentary tone with the brass. You can see that the green velosteam already has a longer longer wheelbase, too.



This image will answer your online query for 'steam motorbike', but Ben had developed that too. The red option had a simplicity and symmetry I really quite liked. Developed, it could certainly have become a second velosteam design within the same world.

We had finalised the highwayman's costume by now, so we discussed the posing of the velosteam and rider on a page. Ben wanted to try several options: working with the green velosteam with a few features of the others, he presented me with four alternative drafts for a front page.



The four variations here now look a little flat—but only because I've been looking at Ben's final images so much! There was a lot to refine again, with some very detailed discussion and lots of bullet points, but I knew we were getting really quite close. At this stage I still hadn't really decided how heavy the velosteam should be—and the acrobatics here convinced me we should beef it up!

Next, a worked up version of the green velosteam. Ben's linework here is really fantastic and he'd also re-



sponded to my request for a change in mood.

My wife Cheryl had a few recommendations—particularly regarding the colours Ben used here. She wanted a different coloured frame, I wanted the moon and moonlight a bit more worked up. I asked for the highwayman to be 10-15% larger in relation to the velosteam and we talked about the vents and the practicality of having smoke in your face—even with the ubiquitous steampunk goggles—which in this instance are certainly functional!

Ben as always was professional and happy to keep refining the ideas. I can't stress how helpful this was. He had also chosen a font which I still really quite like for the titling. I did a whole research into characteristic fonts earlier in my preparation for my campaign and this sparked my search for something less sharp. But look at that moonlight on the letters! Fabulous. And the underside of the machine: there are the condensers and the firebox and all sorts of gubbins. The saddle area has a great cutaway, the rivets give the machine weight, the highwayman's cloak is flapping in the midnight breeze. Yes!

Ben's final submissions before I launched the project changed everything. The clarity and quality really convinced me that I could show my gamebook to the world and be sure that the images did justice to my text. Ben also—off his own bat—offered me the alternative of a dawn ride, rather than a midnight one, which is still on the cards for a cover option. However, the midnight rider was always the plan for my flyers and gave me a dark background to make my text 'pop' off from.

I'll finish with this: I've learnt a massive amount in the process of working with Ben. The time spent refining ideas is time well-spent and money paid for it is money well-spent too.

