A couple of years ago we spotted a do-it-yourself book scanner at Wired.com, the handiwork of Daniel Reetz, then a graduate student in visual neuroscience. Reetz cited “outrageous textbook prices” as the impetus to his original design, a $300 collection of scavenged lumber and two Canon Powershot A590 cameras. After appearing on the collaborative do-it-yourself site instructables.com, the scanner spawned an apparently flourishing subculture of DIY book-scanner building and a website of its own, diybookscanner.org. Their motto: “Let’s put a book scanner in every hackerspace.” Catchy, right?

The book scanner is essentially a digital camera fixed above a frame that holds down the pages while you photograph them. It has two advantages over an ordinary flatbed scanner: it’s faster — diybookscanner.org claims you can shoot up to 1,200 pages an hour — and it cradles the book so its spine is protected. But it still won’t turn the pages for you.

The book scanner may make taking pictures of your book’s pages easier, but it doesn’t reconstitute those pictures as a readable file — that is, a homemade ebook. As they say on diybookscanner.org, “All those page-pictures need post-processing. We have two excellent Free software packages — one called Book Scan Wizard and one called Scan Tailor to clean the pages up in just a few clicks. After that, they can be converted into the format of your choice, and read on the device of your choice.”

Earlier this week Gizmodo reported that Google books engineer Dany Qumsiyeh “has designed a $1,500 automated scanner from sheet metal, dissected electronics, and a household vacuum.” As described on the Google page, “Linear Book Scanner is a prototype automatic book scanning device. The device moves a book face-down over linear sensors to capture page images, and uses vacuum pressure to turn pages automatically as the book moves.”

According to Wired, commercial automated book scanners cost from $5,000 to $50,000. “The $50,000 Kirtas book scanner, for instance, can capture 3,000 pages an hour.” The Qumsiyeh prototype, on the other hand, costs about $1,500 and scans approximately 700 pages an hour. As you’ll see from the video below, the Linear Book Scanner isn’t quite ready to scan your signed firsts. Google is disseminating it as open source as a means of attracting improvements.
Dan O’Connor is the Managing Editor of Melville House.