

Dentaid Despatch

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We couldn't do it without you!

The oral health charity, Dentaid, based at its offices and workshops in Landford, near Salisbury, has only five permanent staff, augmented by a number of invaluable volunteers, many of whom are local dental professionals.

One of these is Clive Power, who writes about how he became involved and discovered a new career!



Clive and Dave in Uganda

“Back in February & March this year I was involved in a Dentaid project to refurbish dental equipment in Uganda and Rwanda. In September 2010 I retired from forty years of NHS dentistry in Wiltshire, and, as our practice had supported Dentaid in various ways over the years, I felt it would be a useful experience to help in a more practical manner. Dave Effamy, Dentaid's senior engineer, gave me a crash course in dental equipment repair and we duly flew out to Kampala where we met dentist Chris Barton and his wife, Polly, who arranged our itinerary and contacts and ferried us from clinic to clinic.



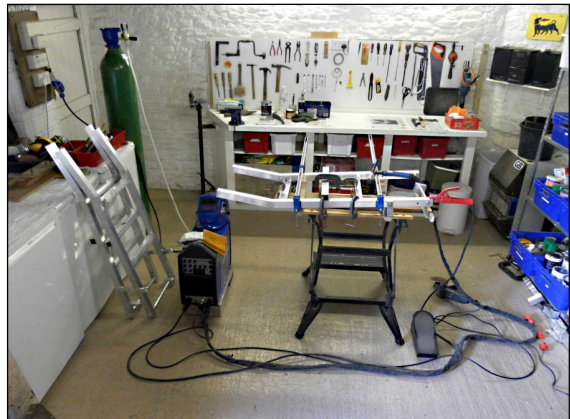
Portable chairs in use in Uganda

“One of the most satisfying aspects of the trip from Dave's point of view was actually to see in use portable examination chairs that he had designed and built over a long period back in his workshop at Dentaid. These were used for outreach visits to schools and isolated communities and, along with a basic hand instrument kit, enabled treatment for pain relief, extraction and simple fillings. The chairs could also be used for medical treatment. They are constructed in

aluminium using welds, bolts and pins and a modified car scissor jack to raise and lower the seat plus a manually adjusted backrest. They also fold up into a carrying bag that is convenient and easily transportable by car, boat or plane.

“On the flight back from Uganda, Dave mentioned that there was a growing demand for these chairs, but that his time in the workshop was fully taken up in repairing and refurbishing equipment destined for Africa, Asia and South America. I felt that I could help in the construction of these really useful items and Dave thought I should be able to develop the necessary skills.

“With the help of my son, who had had some welding experience, I bought a TIG (Tungsten Inert Gas) welder and started on the uphill journey of learning how to join bits of aluminium together – it certainly instils great admiration for the guys who make aluminium bike frames. There is a degree of similarity with dentistry; co-ordination between hands, a foot control and a need for extremely precise positioning. Should the electrode ‘touch-down’



Clive's garage workshop

(touching the filler rod or chair metal), the weld and electrode become contaminated and a major clean-up is required – on a par with reaming through the apex of an upper second molar maybe. Things also become and remain very hot - the learning curve is very rapid! One of the ‘delights’ of “ally” welding is the sudden molten collapse of the metal if you have spent too long trying to coax two bits together and they overheat. It can take hours to rebuild the parts that have melted away. However, when you’ve managed to work out the Argon gas flow rate, the correct amperage, the right size electrode, filler rods and shroud, and created an effective and possibly aesthetic weld, it can be a life-enhancing experience.

“After some weeks of practice, using increasingly larger-sized bottles of gas, Dave delivered the metal, drawings, jigs, nuts and bolts. With great trepidation I began working on the real thing. The aluminium was cut with a mitre saw, machined, tooled and eventually clamped on a jig and welded. My initial welds looked reasonable but did not all stand up to testing (by jumping on them), so the amperage was gradually increased. This meant I had to work more quickly with the torch until the welds had penetrated sufficiently to pass the quality-control test. Initially the effort and concentration required for welding was exhausting and it was only possible to work for an hour or so at a time. With experience, however, things became slightly easier and I completed eight chair bases with no small degree of euphoria, which Dave subsequently collected. The following

day he rang to say, in the nicest possible way, that I had welded, bolted and pinned two brackets on each chair in the wrong position, in spite of have a complete chair to copy and the technical drawings. And I was supposed to be saving him time!

“Another three units were completed without too much further drama and delivered to Dentaaid where all the units were trimmed, finished and bagged. These are destined to be sent to The Gambia, Nepal and Bangladesh.



“I think that I have been very lucky to have found a need which has enabled me to develop a new skill and to help, in a small way, to support Dentaaid’s work in the developing world. However I do not think I am likely to be a threat to the bike builders for a while.....”

