



Inventions are key

The Latest Dirt...

You won't have a pain from the neck up when you work with us from the ground down!

Dig Inside for...

NASA contributes 2

Thankful for inventions.

Welcome back, Britton 3

It's nice when experience returns.

Parenting moments 4

Yes, it happens.

Congrats grads! 4

You'll really wish for a grad invite.

We're working in your city 5

Adding infrastructure in subdivisions.

Mr. Potato Head 6

Small beginnings to the Hall of Fame.

Ray's septic tip 7

Set the schedule and we'll remind you.

Leak, steep slope & 30" pipe 7

Our crew handled this emergency and captured an awesome photo!

Photo contest 8

Keep the pictures coming!

Curtis, Marla, and Mary make up the team that records daily events, photographs C&E crews, shares history, and makes sure it's all error free.

We at C&E Trenching offer this monthly publication free of charge to our premier customers. We hope you enjoy reading about the real moments that molded the lives of our customers and crew. If you would rather not receive the exclusive offers we give to our premier customers, send an email to news@candetrenching.com and we will stop sending you our newsletter.

May 2018

Hit and Run

Last month I wrote about an encounter I had with an Uber driver in Oakland, California when I flew down there for a quick one day trip. We just got back from California again, this time for a four-day trip to take in a church event in Modesto and to spend a little time with my Grandparents who live there. Once again, we bring a story back from there. If you have never been to the Modesto area, this time of year is an exceptionally beautiful time to visit. Not too hot yet, but warmer than here, lots of flowering trees and the roses are just amazing! If you get a chance to go, I think you would enjoy it. I've been going there as long as I can remember so it is almost like a second or third home meaning I may be biased, but I don't think so.



Grandpa and I taking a stroll around his yard. Marla caught us unaware as we were trying to remember which one of his daughters were married by this redwood tree. Good memories.

The Monday we were there also happened to be Marla's birthday. To celebrate, Grandpa's and us piled into our Suburban and headed off to a restaurant that is about a half hour away for lunch. It's a great spot called Jantz Café, owned and operated by a Mennonite family. (It is a restaurant and a bakery, so not the best place to start your low carb diet.) The gal that seated us knew some people from Othello. It's a small world. After lunch, we headed back to take naps and get ready for dinner plans. We were driving along, chatting some and fighting post lunch drowsiness when we saw something that I thought only happened in movies.

We were cruising along at about 55 miles per hour on a two-lane road out in the country when we heard an engine whine heading towards us. It was rapped all the way out and sounded like the driver thought the red line was just another color! The sound caught our attention and I looked ahead to see a car approaching us from the other direction at a very high rate of speed. It looked like a midsize import of the kind that kids like to fix up, modify, and race, so I didn't think too much of it at first. Just another kid hot rodding. But before I could start dozing again, I noticed that I could see the radiator. A weird mod, I remember thinking. No grill to get in the way. This guy was serious! Then I noticed that there were pieces of the front bumper dragging on the ground, which seemed even weirder. As it drew closer, I noticed other flaps of plastic flapping around both sides and some on the hood. The car kept accelerating and just before we met, the rest of the bumper let loose in a mini explosion of plastic with pieces going up and over the car, around both

Continued on page 3

P.O. Box 3788
Pasco, WA 99302
509-545-6940

Thank Goodness for NASA

If NASA hasn't been high on your priority list, it should be. Space travel has been the brain child that instigated the invention of a lot of everyday things that we can't imagine living without. Here's just a few things that we enjoy because someone dreamed big!

Memory Foam

Memory foam was first developed by NASA in 1966. In order to prevent making custom seats for each astronaut to alleviate the effects of G forces during take-off and landing, they devised a material that could mold to the astronaut's shape and return to its 'rest' state when not in use - hence the term memory foam. NASA finally released memory foam into the public domain in the early 1980's.

Enriched Baby Formula

NASA was experimenting with algae as a food supply for lengthy space trips. Eventually, they came to know that a compound of algae contains two fatty acids similar to those found in human breast milk. These two acids were shown to be very important for brain grey matter, as well as being concentrated in human retinas. Despite their apparent importance, they cannot be synthesized by the human body and, therefore, need to be assimilated from your diet. In 1994, the patent for Formulaid, an algae-based, vegetable-like oil containing these two acids, was given. Today, Formulaid is found in most U.S. enriched baby foods and as an additive to infant formulas in over 65 countries around the world.

Dustbuster Started Out as Lunar Rock Drill

The humble 'Dustbuster' was originally developed by NASA as part of their Apollo Space Mission. They approached Black and Decker to develop some form of portable, self-contained drill that could extract core samples from the surface of the moon. Their research ultimately led to the development of a series of domestic battery-powered hand-held devices. Foremost amongst them was the cordless miniaturized vacuum cleaner now immortalized by its original 1970's brand name the 'Dustbuster'. The first commercially successful machine was introduced in 1979 with countless copycats ever since. In 1995, the original 1979 Dustbuster was placed into their electrical collection at the Smithsonian National Museum of American History, formally crystallizing its place in history forever.

Space Blankets

'Space Blankets' (often found in first aid kits and camping equipment) is indeed the product of NASA research. Space blankets are low-weight and low bulk blankets made of heat-reflective, thin plastic sheeting. Their design is perfect for reducing heat loss from the body that would otherwise escape through radiation, water evaporation or convection. The material was, however, originally designed for use on the exterior surfaces of some spacecraft, for much the same purpose. Space blanket material is usually gold or silver in color and is capable of reflecting up to 97% of radiated heat.

Cochlear Implants

Adam Kissiah, a former NASA instrumentation engineer, devised and developed cochlear implants in the mid-1970's. He used his lunch breaks and other free time to study the effects of engineering principles on the middle ear at Kennedy Space Center's technical library. Kissiah was driven to develop the device by his frustration with his own poor hearing. He was also the recipient of three failed corrective surgeries to remedy the problem. His cochlear implants are able to select speech signal information and convert them into electrical impulses in the patient's ear. It effectively bypasses the



Symmetry... I love it! Thanks to Jack and team, this valve station turned out really well!



This project is close to Milton Freewater and provides access to a new expansion for a free range chicken farm. Fresh gravel in the spring is hard to beat! The fresh gravel smell may compete with roses in my mind!



Jack pauses from working on this valve for the City of Hermiston to take a call. He really is the Jack of all trades!



Yep, NASA helped create hours of fun! Keep reading on page 5.

Hit & Run...Continued from page 1

sides, and even some on the ground with a “whack, whack” as the car ran over them. It didn’t slow down the driver. Their foot was firmly planted on the accelerator and as it shot past us, the wind from it actually shook our large Suburban.

Grandpa and I looked at each other in shock and we all started wondering aloud what that guys deal was. Of course, we didn’t get a look at the person so it could have been a gal as well. I would have estimated it went by us approaching 100 mph but who knows. As we discussed what could have happened someone mentioned maybe it was a hit and run. We drove on about another mile to the next four way stop, and sure enough, there was a half-ton pickup facing the same way we were going with its side smashed in. He had been hit so hard it appeared he had been shoved from our lane all the way across past the oncoming lane. The impact had hit hard enough it had knocked the drive shaft apart and he was dead in the water. As hard as the car hit that pickup, for it to still be going was amazing. I’d like to know what kind of car it was as it was one tough vehicle! None the less, now we know that not all the action in California is just imagination! Although Grandpa did say he had never seen anything like that in all his 89 years, so I can’t promise a recurrence if you visit!



Jose guides a new filter into place. This filter will supply a new orchard not far from Pasco. It’s fun to help our local farmers feed the world in a small way!

Welcome Back, Britton

Britton does a lot of the estimating on C&E’s projects. He is continually looking over new projects and tallying numbers. His off-work hours have been filled with many new things as well. Britton & Richae recently tied the knot and moved back to the Tri-Cities after spending several years in Bellingham obtaining Richae’s special education teaching degree. In December, the two welcomed their first child, Irina. Together,



Welcome, Britton and family, to the C&E team.

they are putting the finishing touches on a fixer-upper house in hopes of purchasing a new, larger home for their family. Hiking and fishing in remote areas beside quiet lakes are a favorite for Britton and will resume after the house projects are finished. We’ve got him drinking coffee, even though he said he’d never drink the

stuff. He’s officially joined the coffee club. When asked about a mentor in his life, he tells us, “About five years ago when I previously worked for C&E, I really appreciated Cwentin, a fellow C&E team member. Cwentin taught me to look for ways to be more efficient and to be better every day. He led by example and showed me what a team 100% focused on their work can accomplish. He just helped set me in the right direction.” Britton appreciates dependable co-workers; folks who you can rely on. Welcome back to the team, Britton. We appreciate you!

Been there, done that, got the t-shirt?

I failed my driving test today. The instructor asked me, “What do you do at a red light?” I said, “I usually check my emails and see what people are up to on Facebook.”

I went to see the doctor about my blocked ear. “Which ear is it?” he asked. “2019,” I replied.

My wife said, “You weren’t even listening, were you?” And I thought, “That’s a pretty weird way to start a conversation.”

Four high school boys afflicted with spring fever skipped morning classes. After lunch they reported to the teacher that they had a flat tire. Much to their relief she smiled and said, “Well, you missed a test today so take seats apart from one another and take out a piece of paper.” Still smiling, she waited for them to sit down. Then she said: “First question: Which tire was flat?”

Parenting Moments

For all of our first-time parents, we just wanted to share with you the following information. These have been tried already so let your kids know that they can focus their energies elsewhere.

- If you spray hair spray on dust bunnies and run over them with roller blades, they can ignite.
- When you hear the toilet flush and the words “Uh-oh”, it’s already too late.
- Brake fluid mixed with Clorox makes smoke, and lots of it.
- Play Dough and microwaves should never be used in the same sentence.
- Super glue is forever.
- VCR’s do not eject PB&J sandwiches even though TV commercials show they do.
- Garbage bags do not make good parachutes.
- Marbles in gas tanks make lots of noise when driving.
- A baseball hitting a moving ceiling fan blade will break a window.

Congratulations Graduates!

Way to persevere and complete the task set before you. Now is just the beginning of the next chapter of life. Make wise choices, work hard and you’ll accomplish great things. For the rest of us in the stands, have fun with a little “Bingo” when the speeches run long.

G	R	A	D	S
Someone mentions Trump	Quote from the Bible	Someone shouts obnoxious nickname (Yay! Pickles)	Inspirational quote	Hear the words “future”, “potential” or “grow”
“When I sat down to write this speech...”	Graduate raises arms in triumph after receiving diploma	Someone in your line of vision is wearing Seahawks gear	“By now you should have learned that...”	Someone thanks a teacher
Someone is wearing tennis shoes with their graduation gown	Someone mentions a high school alumni	FREE	Someone trips going up to receive diploma	Inside joke only graduates get
Facebook mentioned	Someone’s hat falls off onstage	Girl cries when receiving diploma	Ethnic name awkwardly mispronounced	Someone hugs the person handing out diplomas
Childhood anecdote	Class of 2019	References a Tri-Cities landmark	Your child receives their diploma	The environment is mentioned

Thanks for calling, Again!

- Anchor Hauling LLC
- Andrews & Rowell
- Bechtel National Inc.
- Benton County Public Works
- City of Hermiston
- David & Jan Sturgeon
- David Felton
- ECS Northwest LLC
- George Carlson
- Glen Wegner
- Harvest Height Assembly of God
- Hayden Farms
- Kevin denHoed
- LW Weidert Farms - Tim Weidert
- Montierth Farms
- PUD No. 2 of Grant County
- Sage Hollow Ranch
- Simplot/Grandview Farms
- Valmont Northwest Inc.
- White Shield

Welcome to C&E

We thrive on referrals.

- Brandon Currey
- CSS Farms/Agri Pack
- Greg Brandhorst- Cherry Trees
- Kevin Farmer
- OR-Wash Land Development
- Spring Canyon Ranch
- Verle Stutzman

Hey, let us know...

- **Do you receive multiple copies?** Let us know and we’ll give the mailman some relief.
- **Moving soon?** The new occupants might not find our news as valuable as you did. Let us know, because the post office doesn’t.
- **Is your history dull and boring with details that no one would like to read about?** Perfect! That’s normally what every person says when we ask if we can write a story about their history here in the Basin. However, those stories are one of our reader favorites. Can we share some of your memories from the “good ole days”? We would love to chat with you. Call us at 545-6940 or send an email to news@candetrenching.com. We do all the writing work. All you need to do is share the memories.

NASA Inventions ...Continued

patient's natural hearing apparatus to send electrical impulses to different regions of their auditory nerve to the brain. Since its invention, many lives have been infinitely improved by receiving these corrective implants including many who have been deaf since birth.

Infrared Ear Thermometers

NASA collaborated with Diatek Corporation to develop a device that measures thermal radiation emitted by the patient's eardrum in much the same way as it measures the temperature of stars and planets. The immediate benefit of this device is that it avoids contact with mucous membranes and can easily be used for measuring temperatures of newborn patients.

The Super Soaker

The ubiquitous Super Soaker was created by a former United States Air Force and NASA engineer, Dr. Lonnie Johnson. Lonnie conceived of the idea when experimenting with refrigeration systems in his bathroom. During his experiments, a powerful stream of water was shot out of the equipment he was working on. He instantly recognized the potential for making a pressurized water gun and set about making a prototype. He met the Vice President of Larami Toy Company in 1989 at a toy fair and after some refinements the first Super Soaker, 'Power Drencher', went on sale in 1990. The brand name changed to Super Soaker in 1991. They have since become one of the most popular toys ever produced and the term 'Super Soaker' has become shorthand for any pressurized toy water gun.

Scratch Resistant Lenses

In 1972, the FDA passed regulation requiring sunglasses and prescription lenses to become shatter resistant. This led manufacturers to invest in perfecting plastic lenses instead of relying on glass. NASA's AMES Research Center and the Foster-Grant Corporation developed a series of scratch-resistant surfaces for astronaut helmets and other plastic aerospace equipment, which is now used with most sunglasses, prescription lenses and safety lenses.

Artificial Limbs

NASA has contributed immensely to the field of prosthetics and artificial limbs due to their research and need for robotic equipment. Their continued investment in this field has led to the incorporation of many space-age advancements like shock-absorbing and cushioning. This has allowed for the creation (in the private sector) of improved prosthetics for humans and animals alike. By working with companies like Environmental Robot's Inc., other developments in artificial muscle systems, sensors and actuators are quickly being refined and incorporated into modern dynamic artificial limbs.

The next time someone wonders about the necessity of our space program, put on your scratch-resistant sunglasses, pull out your Super Soaker and then take a selfie of the aftermath carnage. However, please avoid kicking them with your prosthetic limb. That would definitely give you a leg up on them.



Final stages of a small subdivision going in. The City required that the half of the road next to the development be rebuilt to current standards. Hard for this farm boy to get his head around since the other side of the road is developed and will never be rebuilt to match. We also took out 4" of asphalt, replacing it with 3" and added a lot more gravel underneath since the existing only had 4" to 6".



Above, Sal is making sidewalk prep look easy! To the right is the new half of the street prepped. The developer was also required to put in a 10 foot wide sidewalk, storm drainage, curb and gutter for his side. The other side has somehow survived for years and likely will for many more! Below is the almost finished project showing both sides of the street.



This Month in History

- First wagon train leaves Independence, MO for California (1841)
- “Buffalo Bill” Cody’s first Wild West Show (1883)
- The Empire State Building was dedicated. (1931)
- Cereal food “Cheerios” hits store shelves. (1941)
- Mr. Potato Head is introduced. (1952)
- Good Housekeeping Magazine first hits the newsstands. (1885)
- Manhattan Island is sold! Indians agree to the deal in exchange for \$24 in cloth & buttons (1626)
- John Deere produces the first steel plow. (1833)
- The U.S. Post Office is established. (1794)
- A “Golden Spike” was driven into the railroad tracks at Promontory Summit, Utah, connecting the tracks of the Union Pacific and Central Pacific railroads, creating the first Transcontinental railroad. (1869)
- The syrup for Coca Cola is invented by Atlanta Pharmacist John Styth Permerton. (1886)
- The lawnmower is patented. (1899)
- The first color pictures of Earth from space are sent back from Apollo 10. (1969)
- BF Goodrich manufactures the first tubeless tire. (1947)
- The flush toilet is patented. (1792)
- President Abraham Lincoln established the Department of Agriculture (USDA) (1862)
- Charles Hires invents Root Beer. (1866)
- The American Red Cross was formed. (1881)
- The debut of “Mister Rogers’ Neighborhood”. (1967)
- Ford ceases production of the Model “T”. (1927)
- The pop-up toaster is patented. (1919)
- Bing Crosby sings “White Christmas” into the record books as the biggest selling record. (1942)



Here the crew is working in a tight space next to an existing chicken barn, getting ready for the next. Fun times getting work done. We're not wishing for snow; dirt is way more fun!

The Brains Behind Mr. Potato Head

Mr. Potato Head really was a trend setter. In May of 1952, Hasbro launched their first Mr. Potato head. The first set sold had hands, feet, ears, two mouths, two pairs of eyes, four noses, three hats, eyeglasses, a pipe and eight felt pieces in the shape of facial hair. It had no body because you used an actual potato instead of a plastic piece.



Mr Potato Head was the first toy to be advertised on TV and became the first toy to be marketed directly toward a child audience. Prior to this all toy advertisements were marketed toward the adults who bought them for their children.

The success of Mr. Potato Head was amazing. Millions were sold the first year. In 1953, Mrs. Potato Head was added along with Brother Spud and Sister Yam. Soon after its major debut, red flags went up because small children were choking and cutting themselves on the small, sharp pieces. In 1964, Hasbro unveiled the large, plastic potato and oversized blunt pegged parts.

In 1985, Mr. Potato Head received four postal votes in the run for mayor of Boise, Idaho in the “most votes for Mr. Potato Head in a political campaign” as verified by Guinness World Records.

In 1987, Mr. Potato Head became “Spokespud” for the annual Great American Smokeout and surrendered his pipe to Surgeon General C. Everett Koop in Washington, D.C.

In 1995, Mr. Potato Head made his debut in Hollywood with a leading role in the Disney/Pixar animated feature Toy Story, with the voice provided by comedian Don Rickles.

In 2000, Mr. Potato Head was inducted into the National Toy Hall of Fame at The Strong in Rochester, NY.

Ray's Twilight SEPTIC SERVICE

RAY'S TRACKS IT SO YOU
CAN FORGET IT.



Satisfaction
guaranteed.
Pump your
tank today!

TIP #1 Determine a pumping schedule

When did you last pump your tank? This month it is time to review your pumping schedule in order to protect your septic system.

*****Pump your tank every three to five years*****

If you've only recently moved into your house, most mortgage companies will have required that the tank be pumped and inspected prior to approval of the loan. If for some reason that didn't happen, it's better to pump than not to pump.

Below are some important things to do:

- Create and use a simple chart to list when and who pumped the tank. (When you use us, we do this for you and will send you a simple reminder when it's time to pump again.)
- Always ask for a report of condition from the pumper.
- Ask if water back-flowed from the drain field, the condition the concrete was in, and if all baffles were in place.

If you have more than five residents in your house, you will probably need to pump your tank more frequently.

Exclusive Let us drop off our exclusive, free gift book on how to keep from ruining your septic system when we pump your tank.

509-375-3333 -- TwilightSeptic.com

Summer is coming....

For her summer job, my 18-year-old daughter arranged interviews at several day-care centers. At one meeting, she sat down on one of the kiddie seats, no simple task for most people. The interview went well, and at the end, the day-care center director asked the standard question, "Can you give me one good reason we should hire you?" "Because I fit in the chairs," she replied. She got the job.

I asked my Canadian friend "Did you have a good summer? He replied, "Yes indeed. We had a great picnic that afternoon!"

I was at a miniature golf course on a brutally hot day when I saw a father with three kids. "Who's winning?" I asked cheerfully. "I am," said one. "No, I am," said another. "No," the father said. "Their mother is!"

My two-year-old cousin scared us one summer by disappearing during our lakeside vacation. More than a dozen relatives searched the forest and shoreline, and everyone was relieved when we found Alex playing calmly in the woods. "Listen to me, Alex," his mother said sharply. "From now on when you want to go someplace, you tell Mommy first, okay?" Alex thought about that for a moment and said, "Okay. Disney World."



What a picture! Here Robert and crew are working on a steep hill doing an emergency 30" steel leak repair for a long time customer. So cool to catch the barge at just the right time!

Dig Inside for...
NASA contributes 2
Thanks for inventions.

Welcome back, Britton .. 3
We're glad you're here.

Parenting moments 4
Yes, it happens.

Congrats grads! 4
You'll wish for a grad invite.

We're working around 5
Adding infrastructure.

Mr. Potato Head 6
Small beginning big ending.

Leak, slope & 30" pipe 7
Emergency handled.

Photo contest 8
Send Pictures.

MORE INSIDE!!!



www.CandEtrenching.com

509-545-6940

P.O. Box 3788

Pasco, WA 99302

PRSR STD
U.S. POSTAGE
PAID
PASCO, WA
PERMIT NO. 200



<<Name>>
<<Company Name>>
<<Street Address 1>>
<<City>> <<State>> <<Postal Code>>

Each month has an average of 30-31 days, except the last month of school which has 1,725 days....

Photo Contest

The Latest Dirt went to... ...Asarco Copper Mine!

Cwentin & Amy Clifton along with their two children toured the Southern US this winter and enjoyed a stop at Asarco Cooper Mine in Arizona. Cwentin is a C&E team member so you can imagine the interest in the deep holes and mining industry here. After seeing this gigantic equipment I'm not sure if Cwentin will ever be satisfied with our "big" rigs.



Send Us Your Picture

Get that camera out and snap some pictures, then send them to us. The catch? Every picture submitted must show a copy of our newsletter. So when on vacation, sitting around a cozy fire, jumping out of an airplane or pulling an Evil Knievel stunt, hold a copy of our newsletter and take a photo. Then send it in to us and you will be entered to win one of our custom C&E dump trucks loaded with C&E prizes. Send your picture to news@candetrenching.com.

