CONFIDENTIAL WORKING PAPER · PREPARED FOR WALTER WILKINSON

The Owen Cipher-Document Project

A master strategic tome: the scanner, the parts, the custodian, and the plan

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This is your document — the single place where the engineering and the strategy sit side by side. It gathers the complete scanner design and parts list, records how deeply the Baconian and Church Universal and Triumphant material is already understood, names the people who matter, and lays out a step-by-step path — including the Kaggle idea — for turning Dr. Orville Owen's thousand-foot cipher canvas into a rigorously audited, digitized, public dataset. The presentation pieces meant for *their* eyes will be built separately; this one is candid.

Contents

I. The North Star

The larger ambition behind all of this is **a rigorous cryptographic audit of the ciphers Sir Francis Bacon is said to have invented** — and the first thing to be clear about is that there are *two* of them, and they are separate silos. They share exactly one thing: Bacon as their common inventor. In mechanism, in evidence, and in their modern rediscoverers they have almost nothing in common, and conflating them is the classic error this project refuses to make.

The bi-literal cipher is a typographic, steganographic method — a hidden binary stream carried in the choice between two subtly different typefaces, five letters encoding one concealed character. Its great modern champion was **Elizabeth Wells Gallup** at Fabyan's Riverbank Laboratories; it was there, too, that **William F. Friedman** cut his teeth before becoming the twentieth century's foremost cryptologist and, in the end, the bi-literal cipher's most rigorous critic — which makes him the patron saint of exactly the kind of scrutiny intended here. *This cipher has already been taken on:* an image-processing audit of the bi-literal cipher — reading the two typefaces algorithmically off the page — is published on gorhambury.org and is **not** the subject of the present effort.

The word cipher is something else entirely: not hidden in type, but a narrative assembled by pulling words and passages from across many printed works — Bacon's and others' — keyed and delimited by guide words, and physically embodied in **Dr. Orville Owen's roughly one-thousand-foot painted canvas**, wound on his cipher wheel. **The current project is about the word cipher, and only the word cipher.** That single scoping decision

is why we need a scanner at all: the bi-literal audit was a matter of processing printed typography, but the word cipher's evidence is a fragile, thousand-foot physical artifact that has never been imaged. And neither cipher, it should be said, lives inside the First Folio alone — the Folio is one corpus among several they draw upon.

> **The one book that documents both.** The decoded output of both ciphers survives, side by side, in only one place: Margaret Barsi-Greene's *I, Prince Tudor, Wrote Shakespeare* (1973) — the sole structured overview of what the secret texts actually say, and so rare that (in the exhibit's words) *"no copies have been available through any rare book dealer, not even used copies."* Its existence was "hanging by a thread" until it was put online; it is preserved, effectively, only on gorhambury.org, where it is the most important thing on the site. Without it, the very fact that these are two ciphers of one author would be far harder to establish.

That scope drives every engineering decision downstream. We do not need the maximum possible resolution. We need **faithful color** — because Owen personally marked the pages in roughly six colors of pencil — and a **catalog** recording which chunks of text he flagged in which color. That catalog is not a by-product; it *is* the audit dataset. The guide words Owen leaned on — *Fortune, Honour, Reputation, Nature* — occur at anomalously high rates (515, 1060, 73 and 532 times in the First Folio alone) and behave like delimiters. Any audit worth the name has to test whether structure like that carries real signal or merely the appearance of it.

II. The Scanner

The instrument is a bespoke overhead camera scanner: a phone camera rides on a rolling carriage along a pair of horizontal rails, looking straight down at the canvas laid flat below, and photographs it in overlapping tiles that are later stitched. It is deliberately built from off-the-shelf strut channel so it bolts together without welding, knocks down for transport, and can be sourced almost entirely from one hardware supplier.

Why this shape

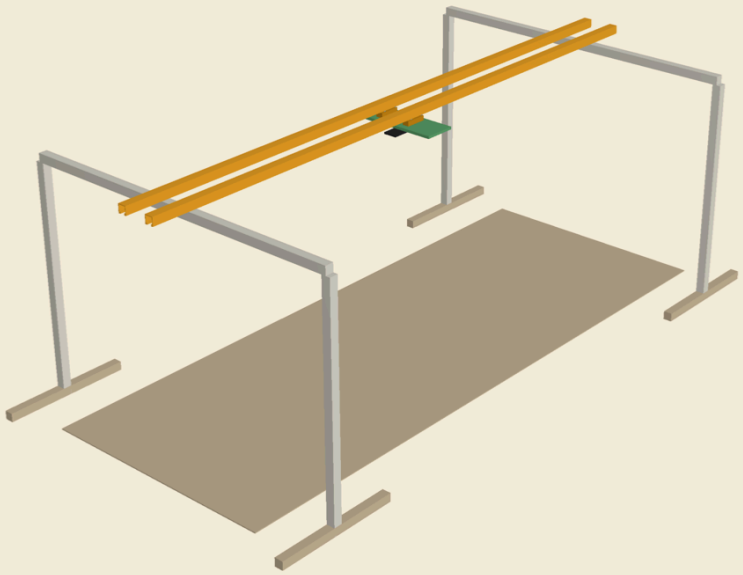
The canvas was originally wound on a spool, so its width is uniform — and no wider than about **48 inches**. That single fact governs the rig. A 48-inch working width lets the lens sit only about 3.4 feet above the sheet (rather than the 5-foot placeholder shown in some of the earlier drawings below), which shortens the whole gantry, improves resolution, and keeps everything at a comfortable working height. At that distance an iPhone SE's 12-megapixel camera resolves roughly 78–93 ppi across the width; the 48-megapixel mode roughly doubles that to about 156 ppi — more than adequate for text this size, which is why the design is tuned for color fidelity rather than for chasing pixels.

GOVERNING SPECIFICATIONS

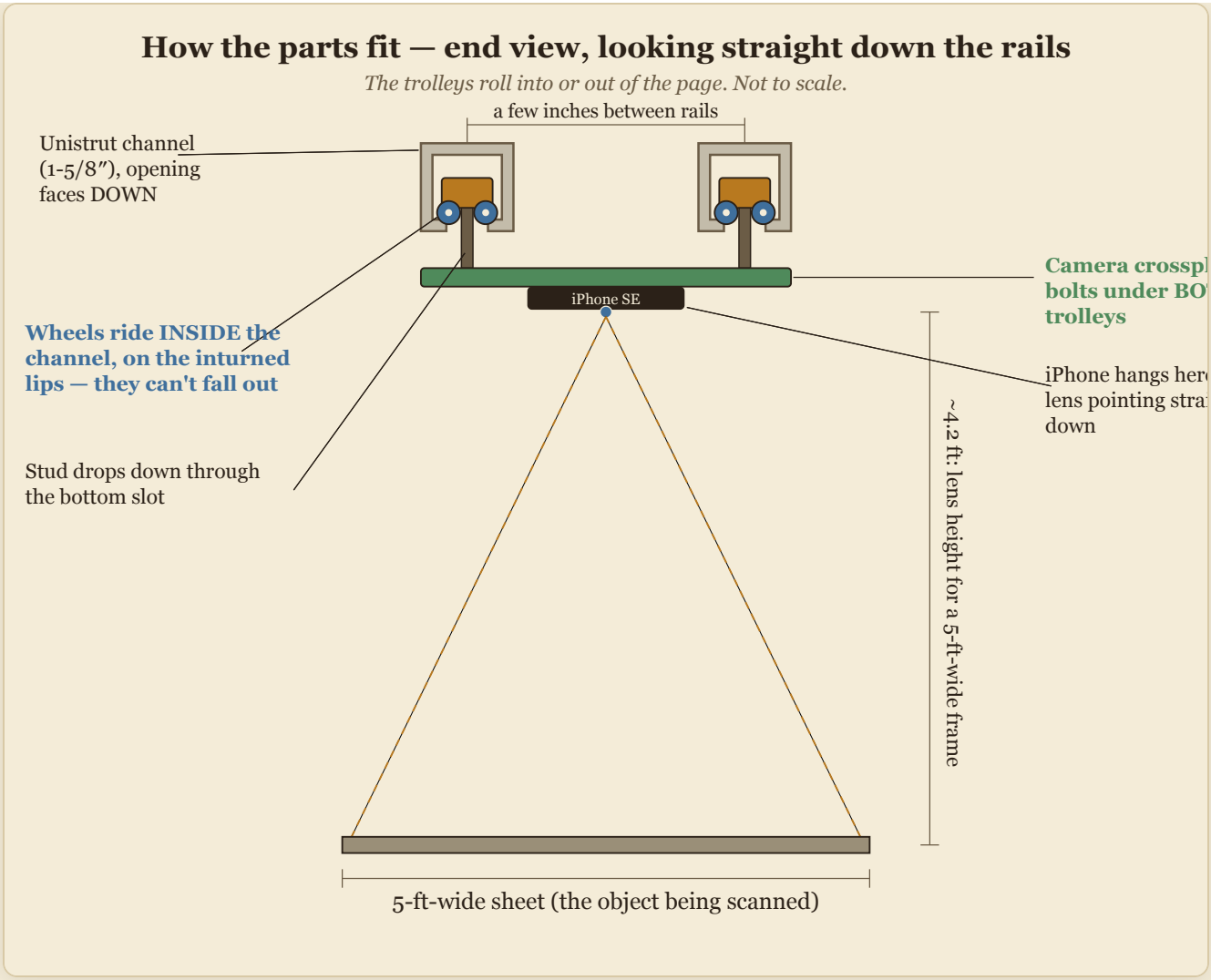
Canvas width	≤ 48″ (uniform — it was spool-wound); total length ~1,000 ft, in sections
Lens height	~3.4 ft above the sheet for a 48″ frame *(H = (W/2) / tan(HFOV/2))*
Camera	iPhone SE, 12 MP baseline (~78–93 ppi) · 48 MP option (~156 ppi)
Shot cadence	one frame every ~2.6 ft at 35% overlap (an 8-ft section → 3 shots; 10-ft → 4)

Real requirement	**true color** + a color→text catalog of Owen's ~6 pencil colors
Construction	1-5/8″ strut throughout; bolted, no welding; knocks down; optional casters

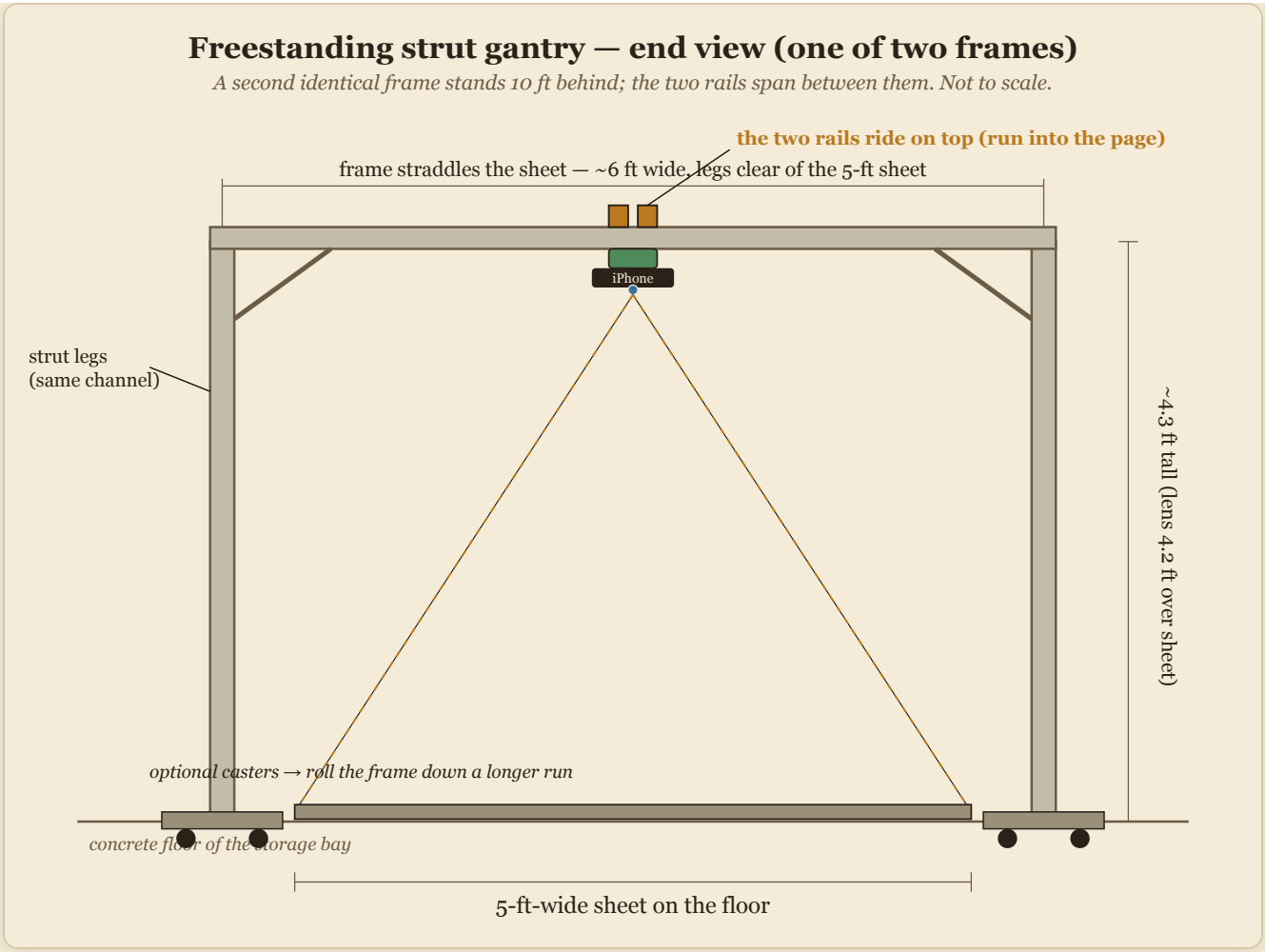
Note on the drawings: several were drawn against an earlier 5-ft canvas assumption and are labeled accordingly. They remain correct in geometry and method; simply trim the heights and the lens-drop to the 48″ figures above when you build. Everything else — how the trolleys ride, how the plate hangs, where the holes go — is unchanged.



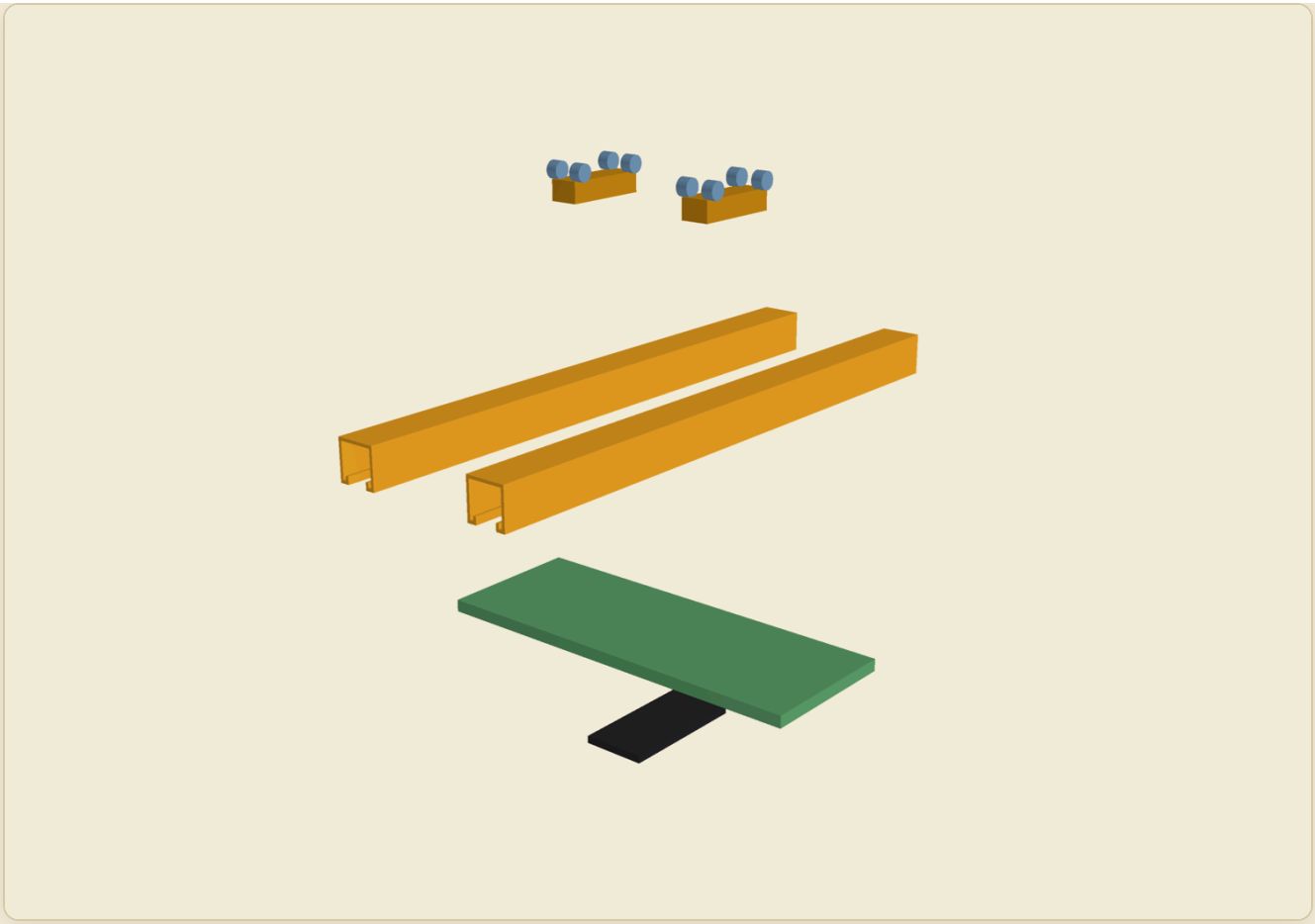
The complete scanner, shaded 3D view. *Two rails span a freestanding strut gantry; a rolling carriage carries the phone, lens down, over the canvas laid flat beneath. Built entirely from bolt-together strut channel so it needs no welding and knocks down for transport.*



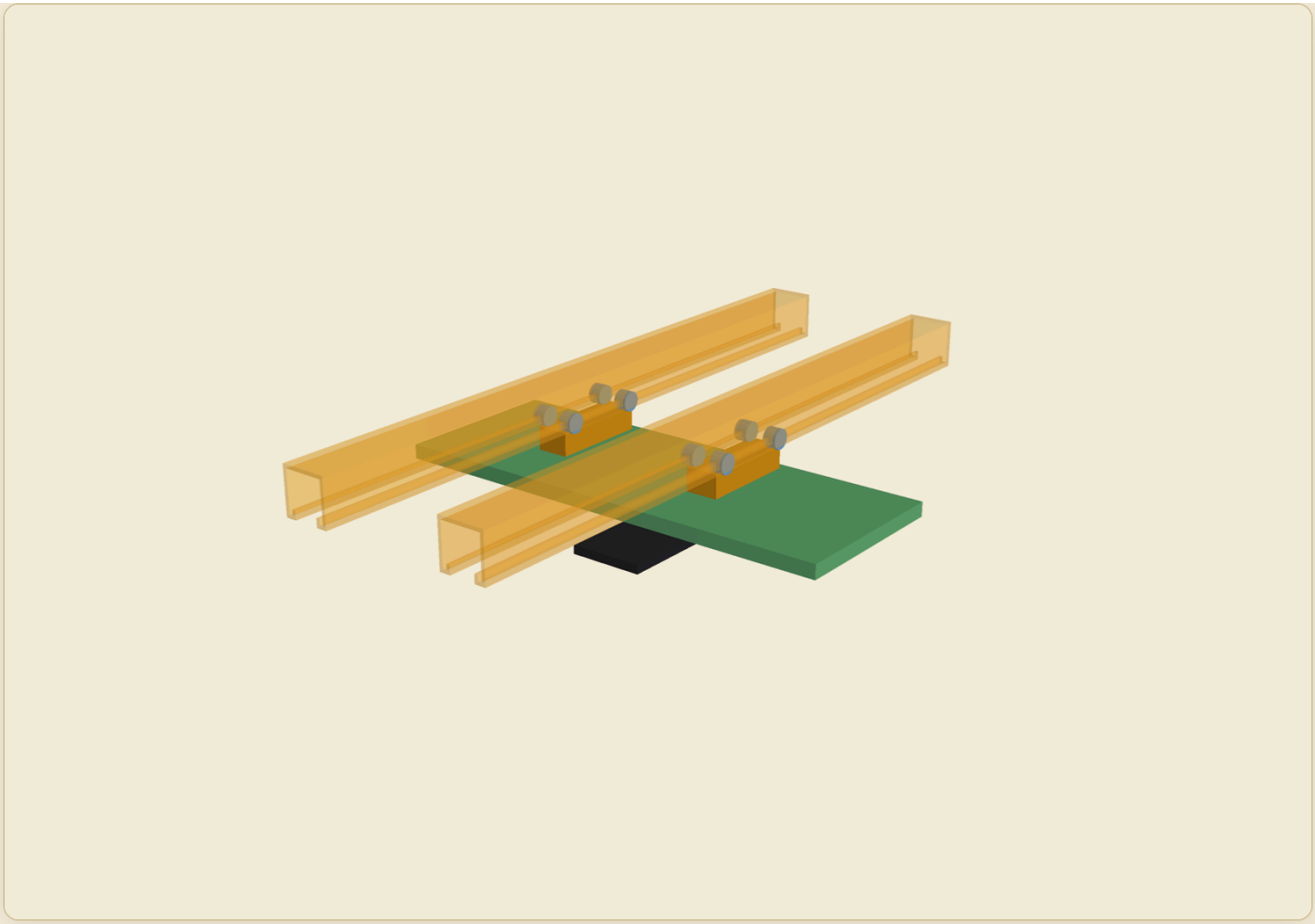
End-view cross-section — how the parts fit. *The two channel rails hang opening-down; the trolley wheels ride inside the channel on its inturned lips so they cannot fall out, and a stud drops through the bottom slot to carry the camera crossplate and the phone below it.*



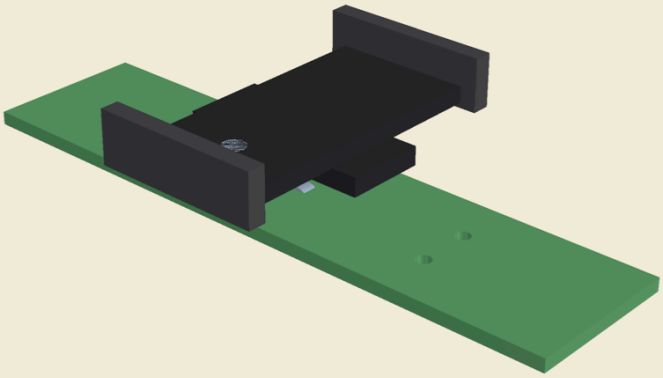
The freestanding gantry — end elevation. *Two 'goalpost' frames stand at each end of the run with the rails spanning between them; the legs straddle the sheet, and optional locking casters let the whole frame roll down a longer canvas section. (Heights shown against the earlier 5-ft assumption — trim to ~3.4 ft lens height.)*



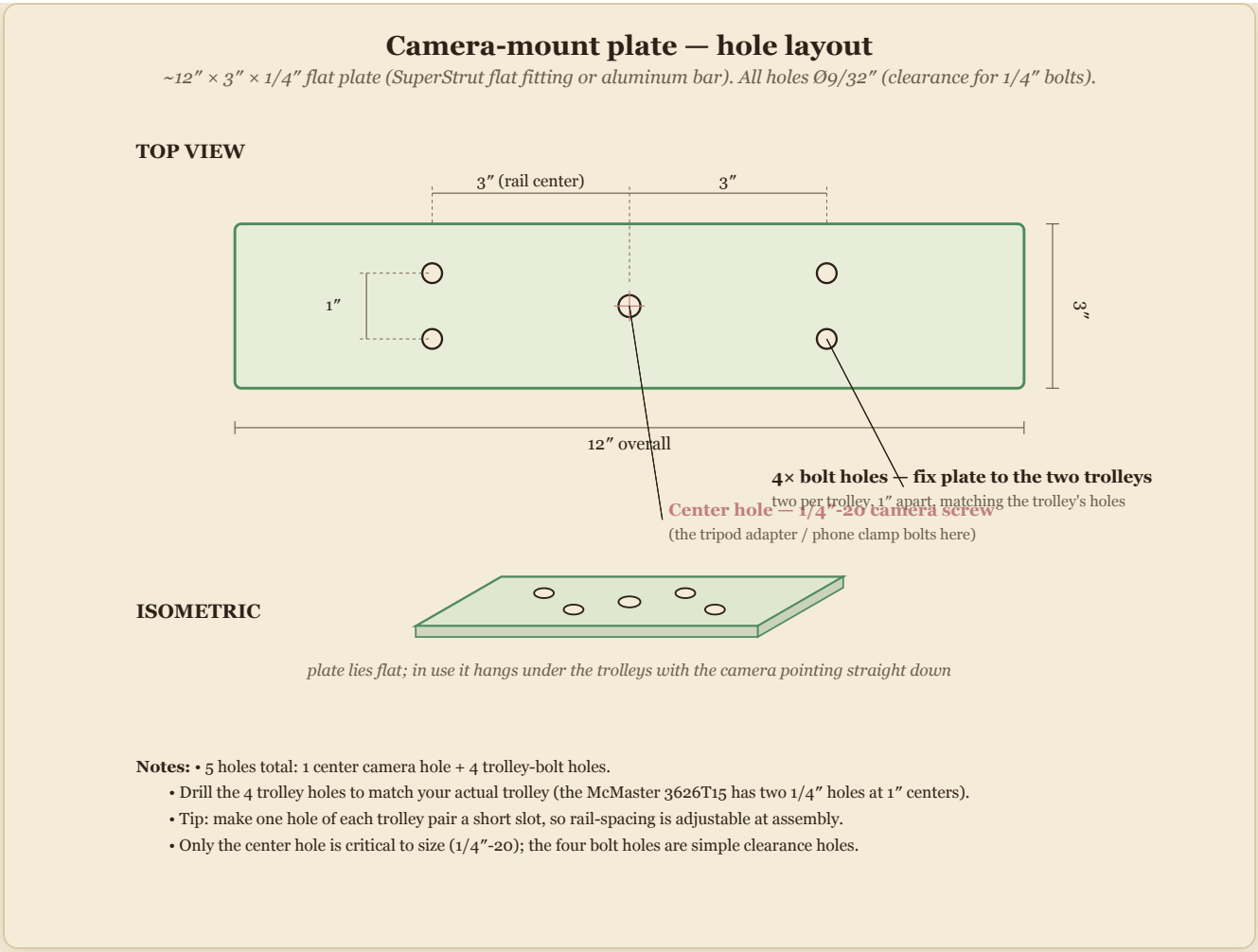
The rolling carriage, exploded. *From the top: the two four-wheel strut trolleys, the flat crossplate that bridges them, the tripod adapter, the spring clamp, and the phone. Separating the parts shows how the stack assembles and how the wheels sit relative to the rails.*



The carriage assembled (ghosted). *The same stack shown transparent so the internal alignment is legible — wheels on the rails, plate beneath, camera hanging plumb below the rail centerline.*



The camera mount in detail. *The green crossplate carries a ¼″-20 tripod adapter at its center hole; a spring clamp bolts to that adapter and grips the iPhone with the lens pointing straight down. This is the assembly that bolts up under the two trolleys.*



Camera-plate hole layout — the one shop drawing you actually drill from. *Five holes on a ~12″ × 3″ × ¼″ bar: one center ¼″-20 camera hole (the only size-critical one) plus four Ø9/32″ clearance holes that bolt the plate to the two trolleys, two per trolley at 1″ centers. Tip: slot one hole of each pair so rail spacing is adjustable at assembly.*

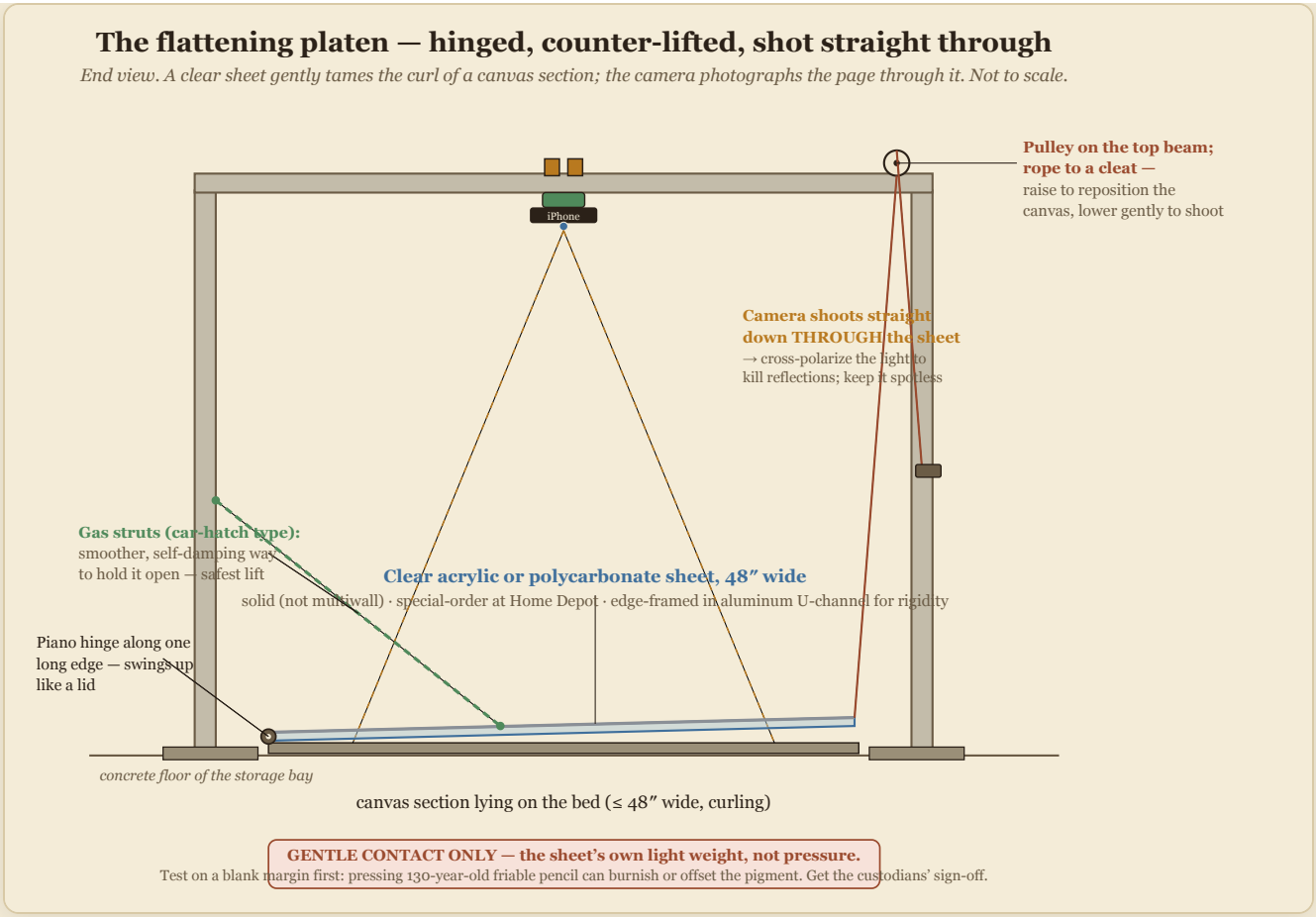
Taming the curl: a hinged flattening platen

We do not yet know whether the canvas sections will lie flat on their own; having been spool-wound for a century, they may well curl. The gentle remedy is a **transparent platen** — a clear sheet lowered over the section to coax the curl out, with the camera shooting straight down through it. Home Depot special-orders exactly the right stock in 48″-wide sheets, which matches the canvas width: clear *acrylic* (OPTIX) is optically clearer and stiffer, while clear

polycarbonate (LEXAN, TUFFAK) is nearly unbreakable — a real virtue suspended over an irreplaceable artifact. Get the *solid* sheet, not the multiwall greenhouse panel. A quarter-inch sheet is rigid enough to flatten evenly yet, framed in aluminum U-channel at the edges, stays light; over a 48″ span that framing is what keeps a thinner sheet from bowing and touching only the high spots.

Hinge it along one long edge like a lid so it swings clear for repositioning, and lift it with either a rope over a pulley on the top beam to a cleat — the arrangement you pictured — or, better, a pair of gas struts of the car-hatch type, which lower it smoothly and hold it open without a free-falling weight near the document.

> **The conservation caution, up front.** This is the one addition that can actually harm the artifact, so treat it that way. Flatten with the **sheet's own light weight, never applied pressure**; roughly a quarter-inch sheet lays down under a pound and a half per square foot, which is gentle, but Owen's pencil is friable and 130 years old, and any rigid surface pressed onto it can burnish or offset the pigment. Test on a blank margin first, aim to *kiss* the high curls rather than press the page dead flat, keep the sheet spotless (dust and scratches photograph), and cross-polarize the light to kill the reflections the extra surface introduces. And because it is their relic, get the custodians' sign-off before any sheet touches it.



The hinged flattening platen. *A clear 48″-wide sheet, hinged along one edge and counter-lifted by a rope-and-pulley (or gas struts), settles over a curling canvas section; the camera shoots straight down through it. The load is the sheet's own light weight — never applied pressure — and the whole page is imaged through a single clean, cross-polarized surface.*

The one subsystem still to specify: color capture

Because faithful color is the whole point, the next design increment is the lighting-and-color package, not more structure. In brief that means **cross-polarization** (a polarizing film over the lights and a polarizer on the lens, crossed, to kill glare off the canvas and the pencil sheen), a **color-reference target** in frame on every shot (an X-Rite/Calibrite-style card) so the six pencil colors can be measured and corrected rather than guessed, and **high-CRI, even illumination** so color reads the same across

the width and from tile to tile. This is a short, cheap subsystem — but it deserves its own drawing and parts list once you decide to proceed, and it should be proven on a test page before any steel is bought.

III. Bill of Materials

Prices are omitted deliberately — hardware prices drift, and you'll verify at purchase. An asterisk * marks every item available through **Home Depot** with delivery to Gardiner: the nearest store is Bozeman (~49 mi), and Home Depot ships-to-home / offers free home delivery to the 59030 area on the great majority of these parts. The only item without an asterisk is the phone clamp, which is easier to source from Amazon.

A — THE CAMERA CARRIER (TROLLEY → PLATE → CLAMP → PHONE)

QTY	PART	SOURCE / NOTES
2	Strut trolley, 4-wheel, sealed bearing (1-5/8″) *	Home Depot — NEWHOUSE HT4W-158S (or light-duty 4WLDT-158). Use just 1 for a single-rail build.
1	Crossmember plate *	SuperStrut flat-plate fitting — OR a ~10″ offcut of your own channel (free, and a guaranteed hole match).
1	¼″-20 tripod adapter *	Home Depot — OBJLGEV 27ISA10084. Gives the standard camera thread.
1	Universal phone spring clamp (¼″-20 socket)	Amazon (Home Depot selection is thin). Holds the iPhone SE.
1	¼″-20 bolt *	Runs adapter → plate. Hardware aisle.

B — THE RAILS & RUNNING GEAR

QTY	PART	SOURCE / NOTES
2	Strut channel, 1-5/8″, 10 ft *	Home Depot — Unistrut / SuperStrut. One length per rail (single-rail build needs 1).
4	End stops / caps *	Keep the trolleys from rolling off the ends. Strut aisle.
~8	Spring nuts + bolts *	Standard strut fastener — plate-to-trolley and rail mounting.

C — THE FREESTANDING GANTRY (ALL 1-5/8″ STRUT; BOLTS TOGETHER, NO WELDING, KNOCKS DOWN)

QTY	PART	SOURCE / NOTES
4	Strut legs, ~3.4–4 ft (cut from 10-ft channel) *	2 legs per end frame × 2 frames. Cut two 10-ft lengths → four legs, trim to height.
2	Top beams, ~6 ft (one per end frame) *	Carry the rail pair; span wide enough that the legs clear the canvas.
4	Base feet, ~2 ft, along the travel direction *	Post-base pads — extend fore-and-aft to stop the tall frame rocking lengthwise.
4	Diagonal brace / gusset (one per corner) *	Square the legs to the top beam. Strut angle brackets or short diagonals.
4	Swivel casters w/ brake (optional) *	Roll the whole frame down the bay for runs longer than the rails; lock to shoot.
~16	Strut corner brackets + spring nuts/bolts *	90° brackets to join legs / beams / feet. Strut aisle.

Frame note: two “goalpost” end frames, one at each end of the run, with the two rails spanning their tops; legs stand far enough apart to straddle the canvas. See the gantry elevation above.

D — THE FLATTENING PLATEN (IF THE SECTIONS DON'T LIE FLAT — LIKELY)

QTY	PART	SOURCE / NOTES
1	Clear sheet, 48″ wide, solid, ~¼″ *	Home Depot special order — acrylic OPTIX (clearest/stiffest) *or* polycarbonate LEXAN/TUFFAK (won't shatter over the artifact). Solid sheet, **not** multiwall. 48×48 or 48×96.
~4	Aluminum U-channel edge frame *	Caps the edges for rigidity + a safe lift edge; lets a thinner sheet stay flat over 48″.
1	Piano (continuous) hinge *	Along one long edge — the platen swings up like a lid. Hardware / door aisle.
1 set	Lift: rope + pulley + cleat * *or* gas struts	Rope-over-pulley to a cleat is all Home Depot. Gas struts (car-hatch type, ~30–60 lb) lower more smoothly — specialty/Amazon.
—	Cross-polarizing film + clean cloth	Kills reflections off the added surface; keep the sheet spotless. Part of the color subsystem below.

Handle as a conservation item, not just hardware: *flatten with the sheet's own weight only, test on a blank margin, and get the custodians' sign-off before it touches the canvas.*

E — STILL TO DECIDE (DEPENDS ON THE BAY)

	QUESTION	NOTES
—	Canvas at floor vs. raised	On the floor is simplest (shortest frame). A low table is more comfortable but raises the gantry.
—	Lighting & color rig	The color-capture subsystem above — cross-pol, color card, high-CRI light. The part that most affects the audit.

** = available through Home Depot with delivery to Gardiner, MT 59030 (nearest store Bozeman, ~49 mi; ship-to-home available). Prove the stitch in Hugin on a few test frames before buying steel.*

IV. The Custodian

The canvas is held by the **Church Universal and Triumphant** (CUT), the church founded by Mark and Elizabeth Clare Prophet, whose Summit University sits at Gardiner, Montana. Access is the real gate on this whole project — and the reason access is *plausible* is that Sir Francis Bacon is not incidental to their theology. He is central to it. Going in already fluent in their own teaching is how we show them this is a serious, respectful undertaking rather than an outsider's curiosity.

What they actually teach — and why the cipher work is already *their* evidence

CUT teaches that the Ascended Master Saint Germain lived a chain of embodiments whose *final* earthly life was as Sir Francis Bacon (1561–1626) — a lineage they publish as running through the prophet Samuel, Saint Joseph, Merlin, Roger Bacon and Christopher Columbus before Bacon. In their pantheon Saint Germain stands alongside the other Ascended Masters — Gautama Buddha and Jesus — as sponsor of America and hierarch of the coming age.

> **The detail that matters most:** in a documented lecture (Detroit, 20 October 1987) Elizabeth Clare Prophet told her followers that *"in the 1890s, two separate ciphers were discovered"* that *"reveal that Francis was the author of the Shakespearean plays,"* describing them as working *"on a principle similar to Morse code."* That is unmistakably the

> Riverbank/Detroit enterprise — Gallup's bi-literal cipher (literally a two-symbol, Morse-like a/b system) and Owen's Word-Cipher circle — named as two separate ciphers, exactly as this project keeps them. The very cipher work at the heart of this project is **already enshrined in their doctrine as the evidence** for who their Master really was. We are not asking them to care about something new; we are offering them the physical relic behind a claim they already preach.

Nor is this being quietly retired. Their own Summit University Press issued a fresh 232-page standalone edition of Elizabeth Clare Prophet's *Francis Bacon: Secrets of the Golden Age Prince* in 2024 — fifteen years after her death — still carrying the whole thesis: the hidden son of the Virgin Queen, the sponsored "hidden circle of authors," the Shakespeare-authorship mystery. A reissue is about the clearest possible signal that Bacon is a *current, marketable emphasis* for them — which means the timing is good. Include this material when we approach them not to inform them, but to demonstrate how deeply we already know it.

The man on their faculty who speaks our language

> **Thomas Wilk.** Listed on Summit University's own faculty page as a *"retired automotive engineer from Ford Motor Company where he worked for 30 years,"* with degrees in **chemistry and computer science**. This is the half-remembered "Detroit auto man" — Ford, thirty years — and he is the single most promising internal ally for the technical case. An engineer with a computer-science degree is precisely the person who will grasp, and likely relish, a cipher-audit-as-Kaggle proposal. There is a quiet resonance worth noting, too: Owen's cipher work was itself a Detroit undertaking. A retired Ford engineer and a retired

> technology engineer, meeting over a Detroit physician's cipher, is a conversation that starts with common ground already in place.

V. The Strategy

The following is the plan as discussed — access, the audit, and the Kaggle competition — kept in the language we settled on. It is written for you; the version we hand *them* will lead with the shared premise and the outreach gift, and will keep the audit's independence explicit but understated.

The Kaggle idea, and why the instinct is right

As a retired technology engineer you can propose to CUT a genuinely new dimension of outreach: elite Silicon Valley engineers are spiritually hungry, and a near-zero-cost way to reach them is a Kaggle project — a competition to actually work Owen's Word Cipher, i.e. the cryptographic audit itself. The idea does three jobs at once, which is rare. It gives the audit a workforce instead of leaving it to one person; it gives CUT a concrete, low-risk reason to grant access (they are not doing a favor, they are opening a relic to serious inquiry and gaining a new audience); and it hands them an outreach channel into a demographic they cannot currently reach. The mechanics check out: Kaggle now runs Community Hackathons/Competitions that are **free to host**, support **judged tracks** (not just auto-scored ones), and even offer prize pools up to $10,000 that Google sometimes funds — so "no cost" is literally true, and the judged-track option is what makes an audit hostable at all.

The one hard design problem — and the fix

A classic Kaggle competition scores submissions against a hidden answer key. The Word Cipher has no agreed answer key — the "true decoding" is precisely

what's in dispute. So a competition literally titled "decipher the Word Cipher" has nothing to score against and would collapse into subjective bickering or a crank magnet. The fix is to reframe the objective around things that *do* have objective answers — which is exactly the cryptographic-audit north star. Two cores work:

> **Reproducibility core.** Owen published specific decodings produced by a specific method (the wheel; keyword-triggered assembly of lines). Give competitors only the method and the source texts, and score how closely they reproduce his *published* output — his own decodings become the answer key. If the method is reproducible, that is a real result; if independent engineers cannot get from method to output without Owen's hand on the wheel, that is an even bigger and fully objective finding.

> **Signal-versus-null core.** Does the claimed method pull more message-like structure out of the real First Folio than the identical procedure pulls out of matched null corpora (scrambled text, other Jacobean plays, randomized keyword placements)? That yields hard numbers — output perplexity/coherence, branching factor, effect size against a null distribution — that sit cleanly on a leaderboard.

The romantic "find the hidden message" framing is the publicity hook; the *scoring* has to rest on reproducibility and signal-detection, or it works neither as a competition nor as an honest audit.

The delicate part — named plainly

> A genuine audit can disconfirm. We would be inviting CUT to sponsor something that might return a null result about a teaching they hold sacred and reissued only last year. Three moves let us hold both integrity and their comfort at once. **First, split the roles:** CUT lends the artifact and the audience; the audit's design and adjudication stay independent — you, or a small neutral panel — so the verdict is neither theirs to pre-decide nor ours to hand them. **Second, launch the safe track first:** make the near-term competition the reproducibility-and-digitization work, which is non-threatening and almost certain to yield a "yes, this can be imaged and structured" win — banking a positive before any verdict on truth. **Third, be transparent up front** that an honest audit can go either way, and make the case that a faith confident enough to reissue the Bacon book in 2024 is a faith that can withstand — even welcome — serious scrutiny. Hiding this would poison the relationship the moment a result lands.

The virtuous loop, and where to start

You do not need the canvas to begin. Owen's *Sir Francis Bacon's Cipher Story* (1893–95), Gallup's *Bi-literal Cypher* (1899–1900) and the First Folio itself are all public domain. A **Phase 1 pilot** competition can run now, on published material alone — which lets you show CUT a working, credible demo *before* you ask for the physical document. **Phase 2** is then the scanned canvas as the premium, never-before-digitized primary-source dataset — and that is the access ask, now backed by proof of concept rather than a promise. The scanner, the audit and the competition click into one loop: access lets you scan, the scan becomes the dataset, the dataset powers the competition, the competition delivers the audit and the outreach, and the outreach is what makes granting access attractive to them in the first place.

On the “spiritual hunger” framing specifically: pitch it to them with a light touch — not “this will convert Silicon Valley,” which could read as naive, but “a respectful, high-caliber technical audience will engage seriously and publicly with the Bacon–Saint Germain material through a problem they find irresistible.” Adjacency and reputation, not a conversion funnel.

VI. Contacts & First Moves

Advocate	Drs. Carla Groenewegen — Summit University faculty; director 1999–2020; founder of its School of Theology & Spiritual Studies; author of the *Baconiana* piece on Owen’s cipher wheel. The natural champion.
Technical ally	Thomas Wilk — retired Ford engineer, chemistry + computer science; the person to win over on the Kaggle/audit merits.
Decision-maker	Gregory Bodwell — corporate counsel; the one who can actually authorize access.
Institution	Summit University, 63 Summit Way, Gardiner, MT 59030 · info@summituniversity.org · 1-406-848-9658
No direct emails	Faculty emails are not published; route to individuals by name via info@, or through the Francis Bacon Society (Groenewegen published in their journal — a warm, credible relay).

1 **FIRST CONTACT**

A short note to Dr. Groenewegen — via the Francis Bacon Society first, info@ as backup — leading with the shared Bacon/Owen premise, not the audit or the access ask. Purpose: open a relationship.

2 BUILD THE PHASE-1 PILOT

Stand up the public-domain reproducibility pilot (Owen + Gallup + Folio) as a working demo — proof that the method can be tested and the material structured, with no access required.

3 BRING IN WILK

Once there's a demo, engage Thomas Wilk on the technical merits — a Ford engineer with a CS degree is the internal voice who can carry the Kaggle idea to the rest of the faculty.

4 MAKE THE ACCESS ASK

With demo and internal ally in hand, present the Phase-2 proposal to Bodwell: scan the canvas in true color, publish the dataset, host the competition — framed as preservation + outreach, audit independence explicit but quiet.

Prepared as your internal working paper · scanner drawings, parts, and strategy in one place · CUT-facing presentation pieces to follow separately.