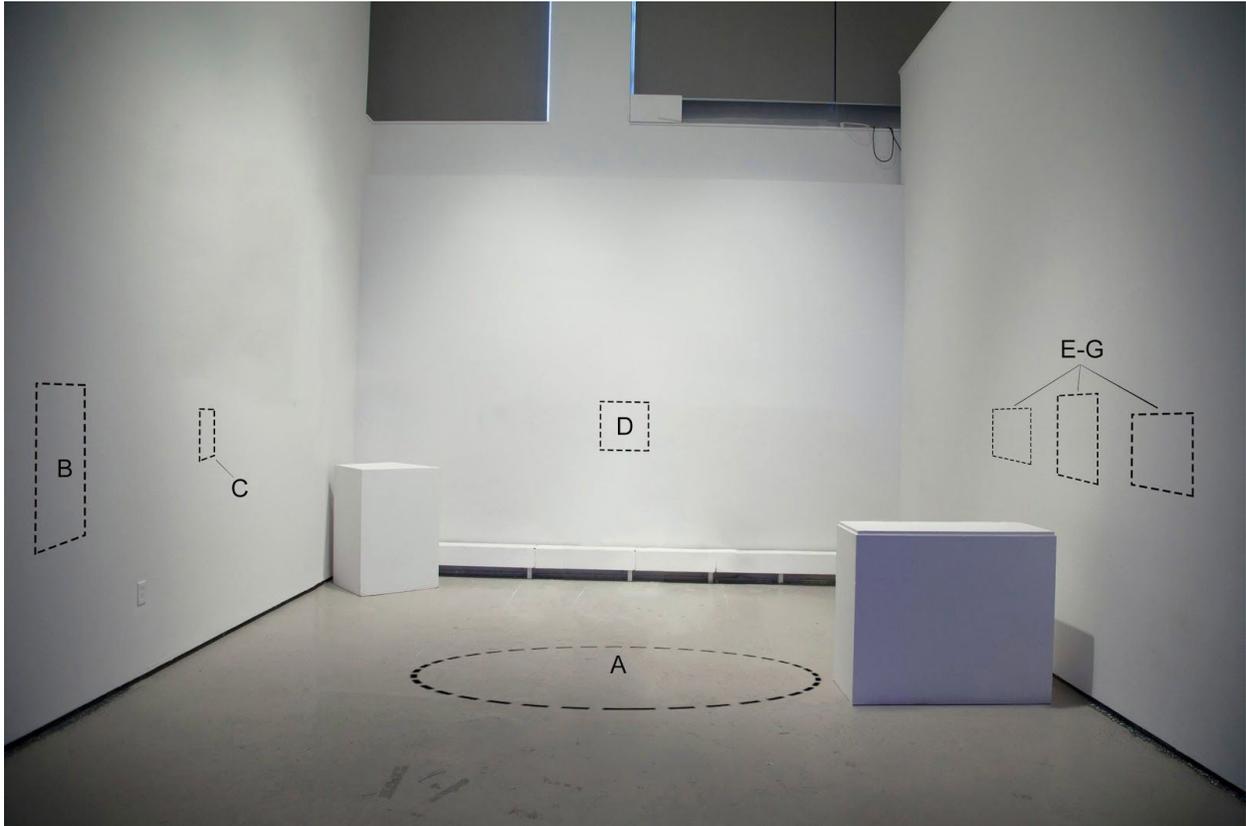


***Rinderpest Collectif***

Harrison K. Smith

1 ..... Description of Work  
4 ..... Statement  
9 ..... Additional Figures

Ö•&ä q} Á Á [ 11



Ö•&ä q} Á Á [ 11 consists of six works, each produced by the reproduction of and creative intervention on a readymade form. The installation is designed to fill the School of Art's mezzanine gallery beneath the elevated ceiling section, a 16-foot square area with three walls. One can view the space from above (from the top landing of a staircase behind the space's right wall), or by turning to the right while descending from the first floor to the School of Art's basement gallery (latter perspective pictured in *Ö•&ä q} Á Á [ 11*).

In the center of the gallery space will stand *P: Ö•&ä q} Á Á [ 11*. The sculpture is a scale replica of a device used by ecologists, public health officials, and herds people throughout East Africa to limit the spread of sleeping sickness by regulating populations of its vector, the tsetse fly (*Ö•&ä q} Á Á [ 11*).<sup>1</sup> Measuring approximately six feet tall with an eight by four foot base, it is composed of sewn

*P: Ö•&ä q} Á Á [ 11* consists of six works, each produced by the reproduction of and creative intervention on a readymade form. The installation is designed to fill the School of Art's mezzanine gallery beneath the elevated ceiling section, a 16-foot square area with three walls. One can view the space from above (from the top landing of a staircase behind the space's right wall), or by turning to the right while descending from the first floor to the School of Art's basement gallery (latter perspective pictured in *Ö•&ä q} Á Á [ 11*).

<sup>1</sup> Brightwell R., et al. "A new trap for *Glossina pallidipes*," *Vil] Ö•&ä q} Á Á [ 11* 33, 1987, 151-189.

white mesh fabric and phthalo blue and black Indian silk strung between three stands. Each stand will consist of a tall stick grounded in a concrete base. I will conceal each base with a mound of soil. Following a design convention used to prevent ants from accessing the trap, I will coat the base of each stick with calcium sulfonate grease where it emerges from the soil.

Ó[ { ~ dæ(urine collected from the Zebu cow), purchased from an online ayurveda retailer, will be mixed into the soil. The smell of this urine is intended to emanate from the trap and fill the gallery with a perceptible, but faint, natural odor.

On the wall to the left of the trap will be a mounted acrylic case holding printed editions of my written statement ( -ã ÉÉÉ). To the right of these statements will be the wall piece Ö} æ \*|^ { ^} á Óææ^ • • Á -ã ÉÉÉ). The piece consists of the body of a tsetse fly<sup>2</sup>, preserved in a capped vial in a 1:4 mixture of \* [ { ~ dæ and acetone (-ã É). When the \* [ { ~ dæ in this formula is replaced with water, the mixture becomes a lab-grade preservation solution for arthropods.<sup>3</sup> The vial will be fixed to the wall by a lab-grade, metallic utility clamp (-ã É).

On the back wall I will hang the two feet by two feet famed Šææ ÁÛ ~ æ^ Á -ã ÉÉÉ) Èn combinatorial mathematics, the term “latin square” is used to describe a square matrix of } length in which each row and column contain values F through }. Latin squares are used in scientific research to randomize sampling procedures, and were employed in the study that identified and optimized the tsetse fly trap liquid bait cocktail.<sup>4</sup> The work Šææ ÁÛ ~ æ^ uses a ten by ten latin square matrix to randomly and evenly distribute fragments of satellite images from the United States Geological Survey’s Earth Explorer that depict the following sites: Massawa, Eritrea, where Italian colonial traders purportedly introduced the rinderpest virus to Africa in 1887;<sup>5</sup> the Langlaagte neighborhood of Johannesburg South Africa, where, in 1886, prospector George Harrison discovered the gold vein that would fuel the subsumption of rinderpest-impacted Swazi migrant workers into a colonial, racial capitalist society, laying the groundwork for the city’s early growth; Johannesburg’s Settler’s Park, home to the George Harrison memorial statue; the Nguruman escarpment, in Kenya, where the first tsetse fly traps were developed and implemented to fight the spread of sleeping sickness; and downtown New Haven, where Yale School of Public Health professor Dr. Serap Aksoy and Yale Ecology and

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<sup>2</sup> I hope to collect the body of a tsetse fly from the Aksoy lab at the Yale School of Public Health.

<sup>3</sup> Fukatsu, Takema, “Acetone preservation: a practical technique for molecular analysis,” *T [ | ^ & | æ Á Ö& || \* ^ É*, (1999) 1935-1945.

<sup>4</sup> Brightwell, R. et al. “Odour attractants for tsetse: Ö || • • ä ææ • c^ } á Ö È / ^ ç ä } ã and Ö • , ^ } ^ / d } ä” *T ^ á æ æ æ á Á ^ c^ / ä æ ^ Ö* q { [ | | \* ^ É 11, Á 1997, Á 297- 299.

<sup>5</sup> Spinage, Clive A., “The Italian occupation of Massawa and the supposed origin of the African Rinderpest panzootic,” *Ö É æ æ Á Ñ ~ !* } æ Á - Ö& || \* ^ É 55, 2017.

Evolutionary researcher Dr. Adalgisa Caccone research tsetse fly biology and the trypanosomes that cause sleeping sickness (a ~~EA~~ D

On the wall to the right of *P: aV/aq*, the *U! [ E ] ^ & d ^ A Q ^ [ ! \* ^ P a s / a ] }* Dseries will hang (a ~~EA~~ ~~EA~~ ~~OE~~). The series contains three wall works using images of the George Harrison monument taken by its sculptor, Tienie Pritchard (a • ~~EA~~ ~~ED~~ Each image will be transferred to film, developed, fixed, and unwashed. Photographs will then be mounted to the inside of a one-inch deep, clear, waterproof acrylic display case, which will be filled with pure *\* [ { ~ d a e* Over the duration of the exhibition, the remaining traces of fixer chemicals will slowly deteriorate each image. The compounds present in the *\* [ { ~ d a e* bath will potentially complicate, or catalyze, this process.

## Statement

In *Üā ā^! ] ^•ō[ ]^&ā*, I position the interactions of material objects as sites of immaterial production, investigating the possibility that immaterial systems of meaning (ideologies, identity categories, social interactions, beliefs systems) are  $\wedge\{ \wedge;*\wedge\} d^{\wedge}$  produced by networks of material objects (physical things such as bodies, land, commodities and the environment), rather than through the simple summation of those objects' traits.<sup>6</sup> This suggests that immaterial meaning is the result of  $!^{\wedge}ae\} \bullet @ \bullet \acute{A}$  amongst physical objects and does not originate in individual objects themselves. I explore such immaterial emergence in *Üā ā^! ] ^•ō[ ]^&ā* utilizing strategies of assemblage — works in the installation are composed through the synthesis of readymade forms to emphasize the interactions amongst objects, re-presenting and reifying links between the natural world, the material human world and its immaterial social structures.

Foregrounding the relationships between objects can reorient a viewer's perspective, encouraging consideration of the network as a whole. The resultant effect is potentially two-fold:

- i. Material objects—nodes in the network—may become ontologically defined by their interactions with other nodes and participation in the larger network;
- ii. Simultaneously, the material network itself may become the focal object, making the relationships of its nodes  $\tilde{a} dae\} \bullet$ —occurring,  $\tilde{a} @$  rather than  $\acute{a}^{\wedge} \wedge\}$ .<sup>7</sup>

These perspectival shifts mimic an ecological lens, one through which individual organisms are defined by their interactions within a larger system, and conversely, the larger system is defined as a product of the intra-actions between its component parts. Like ecosystems, the bounds of each material network are non-existent: every physical object can be connected to all others

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<sup>6</sup> My invocation of philosophical emergence (when a composite entity demonstrates properties that are greater, in some sense, than the sum of those of its component parts) and several other ideas in this statement are adopted from Michel Callon and John Law's essay *CE^{\wedge}\} \&^{\wedge} \acute{A} \acute{A} @ \acute{A}^{\wedge} \acute{a} \acute{a} \acute{A}* Collectif (Duke University Press, 2003). The essay attempts to demonstrate that  $\acute{a}^{\wedge} \wedge\}$  & ^{\wedge}, and therefore  $\acute{a}^{\wedge} \wedge\}$  \sigma, are the emergent products of material networks.

<sup>7</sup> The term "intra-actions" is borrowed from physicist, historian, and feminist scholar Karen Barad. Barad's substitution of the prefix  $\tilde{a} dae$  (within) for  $\tilde{a} \acute{a} \acute{E}$  (between) is based on an ontological extrapolation of findings in the field of particle physics, which—she suggests—disprove the possibility of any physical object being truly "discrete." Among the discoveries she cites is the phenomenon known as "quantum entanglement": following physical interaction, two particles may become "entangled," meaning one member of the "quantum pair" will determine the character of its partner across conventional limits of space and time. For more on her work, see "Diffracting Diffraction: Cutting Together-Apart," *Üada\ae*, 20 (3), 2014, 168-187.

through chains of material intra-actions. As a result, these networks are imbricated with and implicated in ecosystems, making the ecological lens a useful and necessary tool in my work.

Because all physical objects are connected through their material interactions, it is important to distinguish between localized networks of material relations and the super-network these overlapping, smaller networks collectively form. In this statement, I will refer to localized networks as *relational networks*.

The investigation of immaterial emergence from material relations could be realized through the study of myriad *relational networks*, however some are more salient than others. European colonialism, heavily laden with material (ex)change and social consequences, is well suited for consideration through our “ecological lens,” but to engage with this *relational network* we must first define the respective boundaries of its material and immaterial elements.

According to Hussein A. Bulhan’s “Stages of Colonialism in Africa: From Occupation of Land to Occupation of Being,” European colonial actions may be categorized into three “assaults” (242):

- i. on the world of things;
- ii. on the world of people; and
- iii. on the world of meaning.

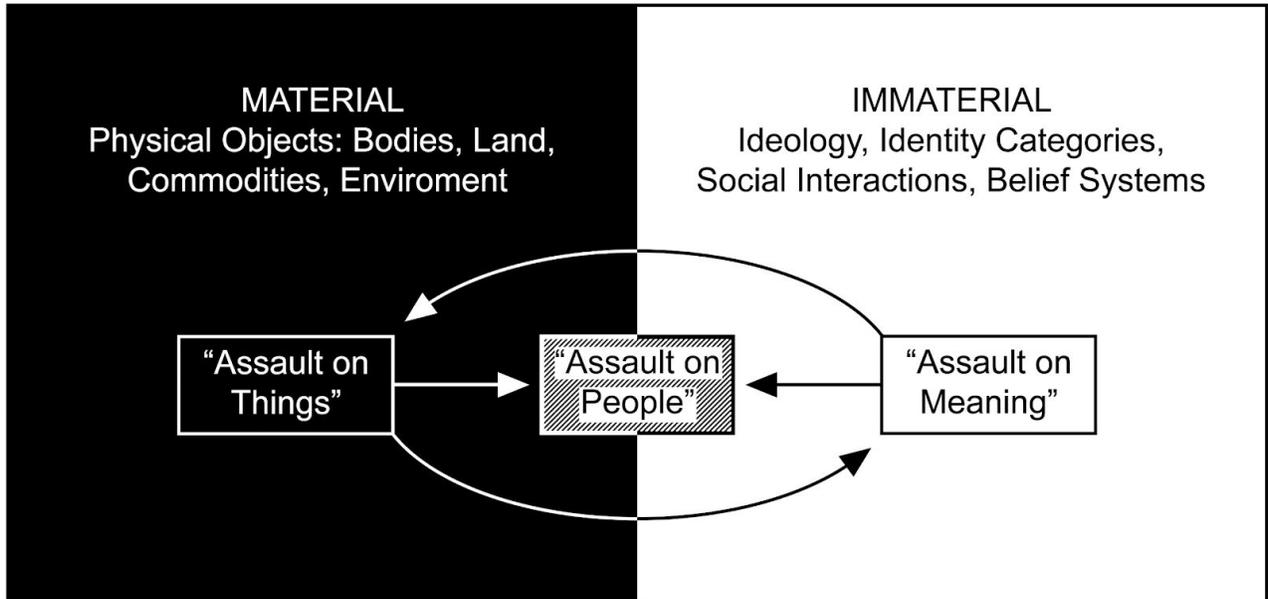
This division conveniently falls along a spectrum ranging from material “things” to immaterial “meaning,” and situates people between the two poles in their capacity for both material (physical) and immaterial (ideological or social) interaction. Yet, Bulhan presents these assaults as outcomes of racial thinking, asserting that immaterial ideology determines material assaults on people and things while failing to incorporate this racial ideology (a form of “meaning”) into his framework.<sup>9</sup> Racial ideology undeniably plays a key motivating role in European colonial action, but it also forms an important valence in the assault colonial systems carry out on the world of meaning. In light of this, I aim to build on Bulhan’s work by demonstrating the cyclicity his linear framework fails to account for: immaterial (racial) ideology is causal of material relations (relegation to certain forms of work, goods and services, ways of living, etc.) but it is also produced and reproduced by these same material interactions (see *Figure 1*). To accomplish this, I have identified forms tied to the introduction of the rinderpest virus in Northeastern Africa, and

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<sup>8</sup> Like “emergence”, this french term is borrowed from Callon and Law’s *Collectif* (p. 11).

<sup>9</sup> Bulhan, Hussein A., “Stages of Colonialism in Africa: From Occupation of Land to Occupation of Being,” *Journal of Modern African Studies*, 2015, 242.

will position their material relationships in my installation as an entry point into the immaterial colonial social structures they produced.



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In 1887, Italian colonists inadvertently brought the rinderpest virus to the Horn of Africa via a herd of imported Indian zebu cattle.<sup>10, 11</sup> Though unintentional, this introduction constituted one of the most effective colonial assaults on people and things in the 19th century. The virus spread rapidly among populations of domestic and wild grazing mammals, killing over 90% of infected herds, and reached the Atlantic coast in under five years.<sup>12</sup> In its wake, millions of people died from starvation and illness contracted due to malnutrition. Rinderpest eventually spread to the continent’s southern tip, devastating native communities and facilitating the sublation of survivors into exploitative colonial labor markets and social systems.<sup>13</sup> With grazers largely absent from grasslands, great swaths of the continent grew into bush. The tsetse biting fly, endemic to Central African bushland, benefited from this expanded range and trailed the

<sup>10</sup> Pearce, Fred, "Inventing Africa," *P^, ÁÙ&ã} ã c* 167, 2000, 30.

<sup>11</sup> The exact location of this ship’s arrival is unclear, but the majority of sources claim it moored at the ports of Massawa. For more, see Spinage, Clive A., "The Italian occupation of Massawa and the supposed origin of the African Rinderpest panzootic," *CE&ã Á Ñ ~ !} æÁ -ÁO [ [ ] \*^ È55*, 2017.

<sup>12</sup> Pearce, "Inventing Africa", 30.

<sup>13</sup> Crush, Johnathan, "Swazi migrant workers and the Witwatersrand gold mines 1886-1920", *Ñ ~ !} æÁ -Á Pã q | ãçÁ^ \* !æ @*, 12, 1986, 28.

course of rinderpest as far South as the Transvaal region of South Africa. These flies carried trypanosomes, unicellular parasitic organisms that cause “African sleeping sickness” in humans and a similar disease in other mammals.<sup>14</sup> The spread of sleeping sickness across the African subcontinent caused a secondary wave of death, and continued to repress the recovery of agricultural communities from rinderpest by rendering unsafe millions of square miles of once disease-free grazing land.<sup>15, 16, 17</sup> In its expanded range, cycling among thousands of newly-impooverished African colonial subjects, the disease would continue to swell into epidemics throughout the 20th century.<sup>18</sup> Towards the end of the century, scientists and African agriculturalists developed a family of fabric traps to study and control tsetse flies.<sup>19</sup> These traps exploit the flies’ instinctual responses to olfactory cues with a liquid cocktail bait that mimics the smell of their flies’ primary prey. The three-part cocktail is composed of two organic liquid compounds (1-octen-3-ol, and acetone) and cattle urine, primarily sourced from African zebu.<sup>20</sup>

African and Indian Zebu share more than a breed. The African zebu urine used to reduce the presence of sleeping sickness in East Africa has an analog in the cattle’s ancestral home: according to the Hindu *Āyurveda* medical texts, Indian (zebu) cows’ urine, called *moḥa* is believed to have purifying properties and is an important ingredient in a variety of medicines.<sup>21</sup> By performing these parallel roles, cow urine allows the ouroboric series of material relations in the rinderpest *epidemiology* to fold back onto itself, modelling the larger immaterial-material cycle of which it is a part. Drawing on these use-conventions, I position *moḥa* in my installation to enact different modes of purification (preservation, eradication, transformation) on a variety of objects in this historical *epidemiology*. Additionally, the liquid’s subtle smell will permeate the gallery,

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<sup>14</sup> Pearce, "Inventing Africa", 2-3.

<sup>15</sup> Pearce, "Inventing Africa", 2-3.

<sup>16</sup> Bouyer, Jérémy, et al., “The Ethics of Eliminating Harmful Species,” *Éthique &*, 69 (2), 2019, 125.

<sup>17</sup> Citing the threat of infection, colonial governments in the early 20th century capitalized on sleeping sickness by forcing emigration from regions they deemed “at risk” in order to expropriate land from majority-native communities. See Jahnke, Hanes E., *Völkervölkerei und Imperialismus* (New York: Weltforum Verlag, 1976), 32.

<sup>18</sup> WHO. Trypanosomiasis, human African (sleeping sickness). 2020. [https://www.who.int/news-room/fact-sheets/detail/trypanosomiasis-human-african-\(sleeping-sickness\)](https://www.who.int/news-room/fact-sheets/detail/trypanosomiasis-human-african-(sleeping-sickness))

<sup>19</sup> Brightwell, R., et al. “A new trap for *Glossina pallidipes*,” *Vet. Rec.* 33, 1987, 151-189.

<sup>20</sup> Brightwell, R. and R. Dransfield, “Odour attractants for tsetse: *Odour attractants for tsetse: *Glossina pallidipes* and *Glossina morsitans*” *Entomol. exp. appl.* 11, 1997, 297-299.*

<sup>21</sup> *Uṣa* *śāstra* (New York: CRC Press, 2003), 88, 293.

reasserting the ontological implications of the collectif by unifying the viewer's read of each independent work.

The intentional assaults of European colonialism in East Africa facilitated by the rinderpest epizootic included: the capture of land through force or deception; the control of law, commodity production, and commerce; and the containment of people within physical boundaries, racial-cultural categories, and exploitative modes of servitude.<sup>22, 23, 24</sup> These strategies—capture, control, and containment—may be described as colonial “trap dynamics,” conceptually rich for material analogy and reification. The works in this installation reference a small suite of objects from the *Uganda* in which Italian colonialism and the rinderpest virus are situated, including the urine of Zebu cattle, South African gold mines, African tsetse biting flies, and Nzi fly traps.

The specific material properties and intra-actions of these objects propose a reflection of the “trap dynamics” in the immaterial colonial systems they produced. The works derived from these forms aim to address the colonial histories entangled with the rinderpest *Uganda*. Using material relationships to evoke notions of infestation, purification, preservation, and entrapment. The emergence of immaterial “meaning” from material systems is present through reference to the historical systems of colonialism, racial capitalism, cultural cleansing and apartheid generated by the rinderpest *Uganda*. Within the gallery, the viewer’s experience will build on this historic emergence to generate novel “meaning”: performing intellectual synthesis to construct a subjective narrative from the readymade forms present in the work. My hope is that the material relationship I’ve produced will underscore the ontological implications of participation in these networks for each physical object, the necessarily expansive and expanding nature of the networks referenced, and the cyclicity of relationships both within the material *Uganda* and between its material and immaterial components.

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<sup>22</sup> Garuba, Harry, “Mapping the Land/Body/Subject: Colonial and Postcolonial Geographies in African Narrative,” *Postcolonial Studies*. 9 (1), 2002, 87.

<sup>23</sup> Berman, B. J. and J. M. Lonsdale, “Crises of Accumulation, Coercion and the Colonial State: The Development of the Labor Control System in Kenya, 1919-1929,” *American Journal of African Studies*. 14 (1), 1980, 55-81.

<sup>24</sup> Benton, Lauren, et al., *Seeing Things: A History of the Visual Arts*. Cambridge University Press, 2001, 153-165 & 170-209.



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<sup>25</sup> <http://www.raywilsonbirdphotography.co.uk/00001%20New%20website/Galleries/Invertebrates/Diptera/Glossinidae.html>

<sup>26</sup> [https://www.amazon.com/Siam-Insects-CHRYSINA-Gloriosa-Specimen/dp/B07QT7TFBV/ref=sr\\_1\\_65?dchild=1&keywords=Siam+Insects&qid=1586829923&sr=8-65](https://www.amazon.com/Siam-Insects-CHRYSINA-Gloriosa-Specimen/dp/B07QT7TFBV/ref=sr_1_65?dchild=1&keywords=Siam+Insects&qid=1586829923&sr=8-65)

<sup>27</sup> [https://www.a3bs.com/universal-jaw-clamp-1002833-u13261,p\\_555\\_970.html](https://www.a3bs.com/universal-jaw-clamp-1002833-u13261,p_555_970.html)

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<sup>28</sup> <http://tieniepritchard.co.za/?portfolio=the-miner>

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<sup>29</sup> <http://tieniepritchard.co.za/?portfolio=the-miner>

